



THE
NEW GRAY'S LUS.

CONSTRUCTIONS TOWARDS

A MORE ACCURATE KNOWLEDGE

OF THE

GREEK LANGUAGE.

BY
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NEW CRATYLUS,

OR

CONTRIBUTIONS TOWARDS

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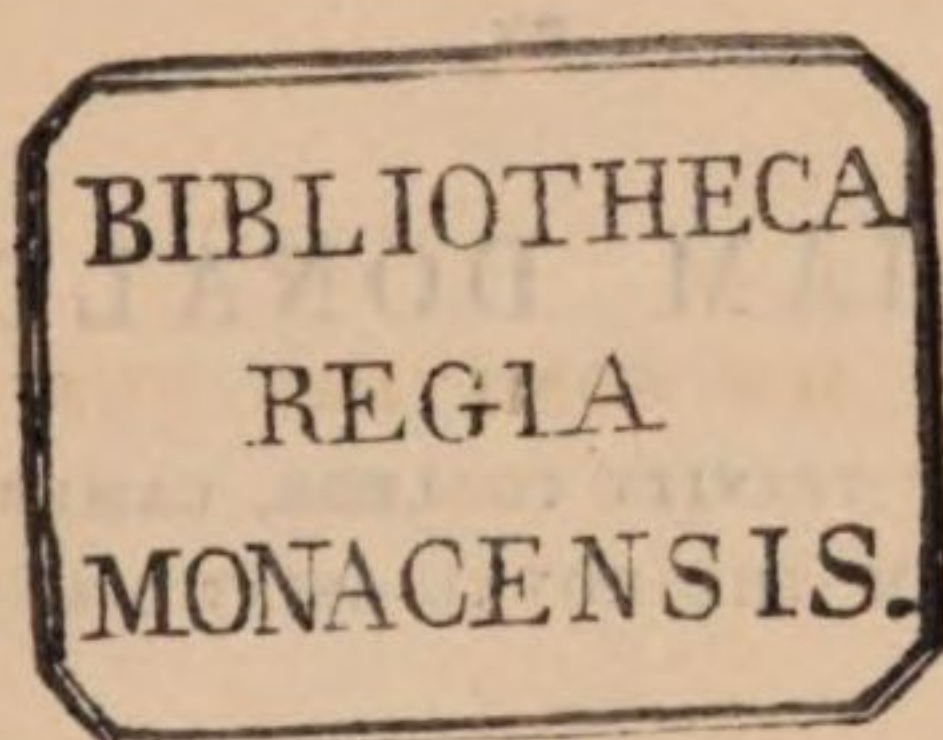
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TO

GEORGE LONG, ESQ.

FORMERLY

PROFESSOR OF GREEK IN THE UNIVERSITY OF LONDON,

AS A SLIGHT MEMORIAL OF REGARD AND ESTEEM

FROM HIS SOMETIME PUPIL,

THE AUTHOR.

THE

GEORGE LOVE, ESQ.

THE

PREFACE.

IN writing this book it has been my object to combine an investigation of general principles with an exposition of particular results; I have endeavoured, on the one hand, to establish a consistent and intelligible theory of inflected language, considered in its most perfect state, that is, as it appears in the oldest languages of the Indo-Germanic family; and, on the other hand, I have attempted to place the Greek scholarship of this country on a somewhat higher footing, by rendering the resources of a more comprehensive philology available for the improvement of the grammar and lexicography of the Greek language, and for the criticism and interpretation of the authors who have written in it. If it is thought strange that I have not confined myself to one or other of these two sufficiently difficult tasks, I may answer, that in the present state of philology it would be impossible to make any real contribution to Greek scholarship without some sound theory of the philosophy of language, and a certain acquaintance with the leading members of the family to which the Greek language belongs; and, conversely, it would not be easy to write an instructive treatise on the internal mechanism and organization of inflected language, with-

out taking some inflected language, by way, at least, of exemplification. Now of all the languages with monosyllabic roots the Greek is the most fitted for this purpose. It is, in the first place, a dead language, and therefore fixed and unchangeable; it is the most copious and expressive of all languages; it stands mid-way between the oldest form of the Indo-Germanic idioms and the corrupted modern dialects of that family, in other words, it has attained to a wonderfully clear and copious syntax without sacrificing altogether, or indeed to any considerable extent, its inflexions and power of composition; it has been more studied and is better known than any other dead language, that is, the facts and phenomena are more completely collected and more systematically arranged than is the case with any other, so that allusions to it are more generally intelligible, and deductions, or new combinations of laws, derived from it, are safer and more convincing; above all, the value of the literature and the actual demand for a knowledge of the language, should induce us to turn upon the Greek, rather than upon the Gothic, the Latin, or the Sanscrit, any new light which the doctrine of words may have gained from investigations in the philosophy of language or in comparative grammar.

Every didactic work is or ought to be adapted to the wants of some particular class of readers, and should presume, in them, a certain amount of preparatory knowledge and no more. I have written, then, first, for Englishmen, who are not supposed to be intimately or

extensively acquainted with the philological literature of the continent: and secondly, I have written for persons who possess at least some slight knowledge of the Greek language, and would rather increase it by investigating the principles of the language and endeavouring to discover the causes of its grammatical peculiarities, than by overloading the memory with a mass of crude, incoherent facts, which can neither be digested nor retained. I have also wished to give those, who come to the study of Greek with no higher aim than to make it the means of obtaining University distinctions, an opportunity of learning from it the dignity of human speech, of perceiving how little of the casual and capricious there is in language, and of convincing themselves that in this, as in other things, there are laws to combine, regulate, and vivify the seemingly disjointed, scattered, and lifeless phenomena. It is possible that the novelty of some of my speculations may induce maturer scholars to take up this book. If so, they will understand from this statement, why I have here and there entered upon long explanations of peculiarities, which can occasion no difficulty to the philologer or have been already discussed by German or French writers, and, on the other hand, why I have despatched with a hint or a reference some really difficult questions, in which the young student could take no interest, while the scholar would comprehend my meaning from a single word.

Many people entertain strong prejudices against every thing in the shape of etymology, prejudices which would be

not only just but inevitable, if etymology or the doctrine of words were such a thing as they suppose it to be. They consider it as amounting to nothing more than the derivation of words from one another, and as this process is generally confined to a perception of some *prima facie* resemblance of two words, it seldom rises beyond the dignity of an ingenious pun, and, though amusing enough at times, is certainly neither an instructive nor an elevated employment for a rational being. The only real etymology is that which attempts a resolution of the words of a language into their ultimate elements by a comparison of the greatest possible number of languages of the same family. Derivation is, strictly speaking, inapplicable, farther than as pointing out the manner in which certain constant syllables, belonging to the pronominal or formative element of inflected languages, may be prefixed or subjoined to a given form for the expression of some secondary or dependent relation. In order to arrive at the primary origin of a word or a form, we must get beyond the narrow limits of a single idiom. Indeed, in many cases the source can only be traced by a conjectural reproduction based on the most extended comparison of all the cognate languages, for when we take some given variety of human speech, we find in it systems and series of words running almost parallel to one another, but presenting such resemblances in form and signification as convince us that, though apparently asymptotes, they must have converged in the form which we know would potentially contain them all. This reproduction of the common

mother of our family of languages, by a comparison of the features of all her children, is the great general object to which the efforts of the philologist should be directed, and this, and not a mere derivation of words in the same language from one another, constitutes the etymology that is alone worthy of the name.

As far as this work is a contribution to the better knowledge of Greek in particular, I wish it to be understood, that I have by no means confined myself to etymological researches, but have endeavoured to avail myself of every resource of scholarship, as well old-fashioned as new. The words, which I have attempted to explain, are those which have either occasioned peculiar difficulty to the young student, or the meaning of which has been considered doubtful by scholars. Where I have thought proper to make a digression for the purpose of interpreting or emending a particular passage, I have always had in view that class of students with whom my experience in teaching has brought me most immediately in contact, and with whose wants and difficulties I am best acquainted. It will be seen, too, that in the selection of passages for this purpose, I have generally confined myself to those authors who are most read in the great schools and Universities of this country. In this part of the work, I have been guided mainly by considerations of practical utility, namely, by a wish to assist those whose business it is to construe Greek authors, and to write Greek exercises. It is for this reason that I have preserved, as far as possible, the old

grammatical nomenclature: the young student regards with a sort of mysterious reverence the uncouth terms of his grammar; they are little household gods to him; and, though, like the *Lar familiaris* of old, they are unseemly to look upon and unavailing to help, there appears to be no good reason why one should take them down from the niches, which they have so long and so harmlessly occupied.

It is painful and humiliating to reflect, how much, after all one's thought and labour, the execution of a task like this must fall short, not merely of the exactions of a rigorous criticism, but even of one's own imperfect conceptions. It may be, indeed, that what I have attempted in this book is not yet to be effected by one man and at one effort, and perhaps, in reference to its wider scope, all that I can hope to do, is to awaken the dormant energies of some young student, who may be qualified at a future period to solve completely and finally the great problem of inflected language;—*ἀλλὰ καὶ ἐπιχειροῦντί τοι τοῖς καλοῖς καλὸν καὶ πᾶσχειν ὃ τι ἂν τῷ ξυμβῇ παθεῖν.*

J. W. D.

TRINITY COLLEGE, CAMBRIDGE,
4th February, 1839.

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BOOK I.

GENERAL INTRODUCTION.

THE
NEW CRATYLUS.

BOOK I.

CHAPTER I.

THE UTILITY OF PHILOLOGICAL STUDIES.

IT may be stated as a fact worthy of observation in the literary history of modern Europe, that generally, when one of our countrymen has made the first advance in any branch of knowledge, we have acquiesced in what he has done, and have left the further improvement of the subject to our neighbours on the continent. The man of genius always finds an utterance, for he is urged on by an irresistible impulse—a conviction that it is his duty and his vocation to speak: but we too often want those who should follow in his steps, clear up what he has left obscure, and complete his unfinished labours. Nor is it difficult to show why this should be the case. The English mind, vigorous and healthy as it generally is, appears to be constitutionally averse from speculation; we have all of us a bias towards the practical and immediately profitable, generated by our mercantile pursuits, which make all of us, to a certain extent, utilitarians, and stifle the developement of a literary taste among us; or, if the voice of interest fails to controul the vanity of authorship, there is still another modification of self-love, a cold conventional reserve, induced by the fear of committing oneself, which imposes silence upon those who have truths to tell.

To this general fact, however, there is one very remarkable exception. The regulations of our grammar-schools, and, perhaps, somewhat of the old custom and antiquated prejudice, of

which we hear so much, have made classical studies not only the basis but nearly the whole of a liberal education in this country, and circumstances, which we shall point out in the following chapter, have created for us a thriving philological literature. Although the rewards and encouragements held out by our great Universities have been considered by many as a sufficient justification of such studies, it is the spirit of the age to inquire, what advantage a young man derives from so protracted a study of Latin and Greek, in addition to and independent of the University distinctions and emoluments which he may have the good fortune to obtain. There is much of reason in this demand, and it is doubtless incumbent upon those who have devoted themselves to such pursuits to point out to others their importance and utility. Hitherto this has not been done in a satisfactory manner; and therefore, although our object is rather to add something to philological knowledge than to justify philological pursuits, we deem it a necessary preliminary that we should endeavour by some plain arguments to recommend to our readers the sort of learning which we wish to increase and the studies which we design to facilitate—that we should make known at the very outset the nature and value of the subject on which we write. And in doing this we disclaim any wish to perplex ourselves with the polemics of the question, as it has been treated by other writers. It is not our purpose to discuss the merits or demerits of our collegiate institutions, still less to impugn or exculpate, as the case may be, the conduct of those who are intrusted with the management of them: least of all would we assert that there is no room for improvement in the present method of our classical studies; on the contrary we hope and indeed expect that they will ere long be pursued in a healthier and a manlier spirit, that much that is superfluous will be retrenched, much that is useful added, so that even the educational theorist may at length admit that there is something more in nouns and verbs than was dreamt of in his philosophy. Our only aim in this place is to satisfy the practical sense of our countrymen with regard to the real uses of philology, properly pursued: how it is and has been prosecuted will appear in the next chapter.

We maintain, then, first that a certain amount of philology is necessary as the basis of a liberal education: and secondly,

that cultivated to its fullest extent philological scholarship furnishes important contributions to general knowledge. Under the name philology we include the two great branches of a scientific inquiry into the principles of language;—the theory of the origin and formation of words, which is generally called the philosophy of language; and—the method of language, or, as it is more usually termed, logic or dialectic, which treats of the formation of sentences¹. Both these subjects are comprised in general grammar, which is therefore identical with philology, and have also their representatives in the etymology and syntax of every particular grammar. Although they are but component parts of one science it is of the utmost consequence that they should not be confused or interchanged: for we will venture to say that the most signal mistakes of philologists may be traced to the practice hitherto so common of supposing that the formation of words may be discussed on a logical basis. In endeavouring, then, to estimate the importance of philology we must consider as separate questions, what is the use of etymology or the doctrine of words, and of logic or the doctrine of sentences: including under the latter all that belongs to the method of language, and under the former whatever pertains to its origin and generation. And in the first place it is to be shown, that the rudiments of philology in both its branches are or ought to be the basis of the intellectual training of man, or of that education which is alone worthy of the name. As logic or the method of language, though properly secondary to etymology, is of more ancient discovery, we shall consider it first.

Education is of two kinds; it is either general or professional, it is either designed for the cultivation of the intellect and the developement of the reasoning faculties, which all men have in common though not perhaps in the same degree, or it is

1. This appears to be the real extent of the term philology. W. von Humboldt, however, would confine it to that department which is conversant about the interpretation of the written monuments of a language, as distinguished from the analysis of its structure and comparison with other idioms, which he calls *Linguistik* (*über die Verschied. d. menschl. Sprachbaues*, p. 202); and an able writer in this country would confine the term philology to a part of the first of the two branches

into which we have divided it. “By philology,” says he, “I understand that study which deals with words in reference to their meaning. It is in this respect the opposite of logic, which strictly speaking is not concerned with the meaning of words at all. The one uses human discourse as a mean of attaining to a knowledge of human thought and feeling; the other explains the conditions under which human discourse is possible” (*Subscription no Bondage*, p. 46).

calculated to adapt him for some particular calling, which the laws of society, on the principle of the division of labour, have assigned to him as an individual member of the body politic. Now the education of the individual for this particular purpose is not an education of man as such; he might do his particular work as well or better if you deprived him of all his speculative faculties and converted him into an automaton; in short, the better a man is educated professionally the less is he a man, for, to use the words of an able American writer¹, "the planter who is Man sent out into the field to gather food, is seldom cheered by any idea of the true dignity of his ministry. He sees his bushel and his cart, and nothing beyond, and sinks into the farmer, instead of Man on the farm. The tradesman scarcely ever gives an ideal worth to his work, but is ridden by the routine of his craft, and the soul is subject to dollars. The priest becomes a form; the attorney, a statute book; the mechanic, a machine; the sailor, a rope of a ship." It was for this reason that the clear-headed Greeks denied the name of education (*παιδεία*) to that which is learned, not for its own sake, but for the sake of some extrinsic gain or for the sake of doing some work, and distinguished formally between those studies which they called liberal or worthy of a free man and those which were merely mechanical and professional². In the same way Cicero speaks of education properly so called, which he names humanity (*humanitas*)³, because its object is to give a full developement to those reasoning faculties which are the proper and distinctive attributes of man as such⁴. Now we do not pretend that philology is of any mechanical or professional use, for we do not call Theology a profession, it is merely a branch or application of philology: we do not say that philology will help a man to plough or to reap; but we do assert that it is of the highest use as a part of humanity, or of education properly so called.

1. See "An oration before the Phi-Beta-Kappa Society" by Ralph Waldo Emerson, p. 5.

2. See Plato *Legg.* i. p. 643 B. ταύτην τὴν τροφήν (τὴν πρὸς ἀρετὴν ἐκ παίδων παιδείαν) ἀφορισάμενος ὁ λόγος οὗτος, ὡς ἐμοὶ φαίνεται, νῦν βούλοιτ' ἂν μόνην παιδείαν προσαγορεύειν, τὴν δὲ εἰς χρήματα τείνουσαν ἢ τινα πρὸς

ἰσχὺν καὶ πρὸς ἄλλην τινὰ σοφίαν ἀνευ νοῦ καὶ δίκης βάνανσον εἶναι καὶ ἀνελεύθερον καὶ οὐκ ἀξίαν τὸ παράπαν παιδείαν καλεῖσθαι. Similarly Aristotle *Polit.* viii. c. 2.

3. *Pro Archia Poeta*, l. *De Oratore*, i. 9.

4. Aul. Gellius, xiii. 16.

The test of a good education is the degree of mental culture which it imparts, for education, so far as its object is scientific, is the discipline of the mind. The reader must not overlook what is meant by the word mind when used in reference to education. That some dumb animals are possessed of a sort of understanding is admitted; but it has never been asserted that they enjoy the use of reason. Man, however, has the faculty called reason in addition to his understanding; he has a power of classifying or arranging, abstracting and generalizing, and so arriving at principles¹; in other words, his mind is capable of method: and thus it has been well said that we at once distinguish the man of education, or, among men of education, the man of superior mind, by the unpremeditated and evidently habitual *arrangement* of his words, grounded on the habit of foreseeing, in every sentence, the whole that he intends to communicate in the particular case, so that there is *method* in the fragments of his conversation even when most irregular and desultory². Accordingly, what we mean by saying that the object of education is the cultivation of our minds, or that the goodness of an education varies with the degree of mental culture, amounts simply to this, that we better perform our functions as rational creatures in proportion as we carry farther the distinction between ourselves and the brute creation, that is, in proportion as we are the better fitted for the discourse of reason.

There are two ways in which we carry on the process of reasoning, just as there are two relations out of which all method or science is made up. The relations are, that of Law, by which we lay down a rule of unconditional truth which we call an Idea, and that of Observation, by which we get to a distinct knowledge of facts. By the former we know that a thing must be; by the latter we see that it is. Now when we reason from the facts to the law, we call it analysis or

1. As the reader may not perhaps be familiar with the Kantian distinction of reason and understanding, it may be mentioned, that according to the critical philosophy understanding is the faculty of rules, derived from experience, and proverbially subject to exceptions, but reason the faculty of principles or laws, to which there

is no exception: the former is the faculty of the unity of phænomena by means of rules, the latter the faculty of the unity of the understanding—rules under principles (*Kritik der reinen Vernunft*, p. 258, 260. 7th edition).

2. Coleridge's *Friend*, Vol. III. p. 133, foll.

induction; when we reason from law to law, when from a known truth we seek to establish an unknown truth, we call the process deduction or synthesis. As then all science is made up of Law and Observation, of the Idea and the Facts, so all scientific reasoning is either induction or deduction. It is not possible, however, to teach inductive reasoning or even to cultivate a habit of it directly; we all reason inductively every moment of our lives, but to reason inductively for the purposes of science belongs only to those whose minds are so constituted that they can see the resemblances in things which other men think unlike, in short, to those who have powers of original combination and whom we term men of genius. If, therefore, we can impart by teaching deductive habits, education will have done its utmost towards the discipline of the reasoning faculties. When we speak of laws and ideas we must not be misunderstood as wishing to imply any thing more than general terms arrived at by real classification. About these general terms and these alone is deductive reason conversant, so that the method of mind, which is the object of education, is nothing but the method of language, and this is the reason why, as we have said, the educated man is known by the arrangement of his words. Hence, if there is any way of imparting to the mind deductive habits, it must be by teaching the method of language, and this discipline has in fact been adopted in all the more enlightened periods of the existence of man. It will be remembered, that in this method of language it is not the words but the arrangement of them which is the object of study, and thus the method of language is independent of the conventional significations of particular words, it is of no country and of no age, but is as universal as the general mind of man. For these reasons we assert that the method of language, one of the branches of philology, must always be, as it has been, the basis of education or humanity as such, that is, of the discipline of the human mind.

With regard to the importance of etymology as a part of a liberal education very little need be said. It is just as necessary that the educated man should be able to select and discriminate the words which he employs as that he should be able to arrange them methodically. We acquire our mother-tongue insensibly and by instinct, and to the untrained mind

the words of it are identified with the thoughts to which they correspond in the mind of the individual, whereas he ought at least to be taught so much of their analysis as to know that they are but outward signs, the symbols of a *prima facie* classification, and to employ them accordingly. In this simplest form etymology is nothing but an intelligent spelling lesson, which the most violent utilitarian would hardly venture to discard.

But, though perhaps every one will at once allow that such a knowledge of language as we have described is an essential element of intellectual training, it may still be asked, what has this to do with the study of two dead languages? In the first place, then, to study one branch at least of philology, namely, Etymology, we must have some particular language in which to study it; and although the method of language is independent of any particular language, yet, like every other method or science, it must have its facts as well as its laws. It will be conceded that if we would go beyond the rudiments of spelling and speaking, if we would catch a glimpse of what speech is in itself and as detached from ourselves, it would be desirable to select some foreign language and if possible one no longer spoken or liable to change: languages still in use are so fluctuating and uncertain that an attempt to get fixed ideas of the general analogy of language from them is like trying to copy the fantastic pictures of an ever-revolving kaleidoscope. The classical languages lie before us in gigantic and well-preserved remains, and we can scrutinize, dissect, and compare them with as much certainty as we should feel in experimenting upon the objects of any branch of natural philosophy. They are, therefore, well adapted to supply us with the facts for our laws of speech or the general analogy of language, and we might make them the basis of our grammatical study even though they had nothing to recommend them but their permanence of form and perfection of grammatical structure.

This, however, is not all: it is indeed necessary to study some language, and that too a dead language in order to give the mind a full grammatical training; but the mere fact of learning another language, whether dead or living, is in the highest degree beneficial. We learn our own language from the lips of a mother or a nurse, it grows with our growth and

strengthens with our strength, so as to become a sort of second self, and the words of the uneducated are household gods to him. This idolatry is shaken, the individual is brought away from his own associations to the higher truths which form the food of the general mind of man, whenever he has learned to express his thoughts in some other set of words. It was a great mistake of Ennius to say that he had three hearts because he understood three languages (Aulus Gellius, *noctes Atticæ* xvii. 17); the heart of a people is its mother tongue only (*Jean Paul*. xlvii. p. 179). The Emperor Charles the Vth was nearer the truth when he said—*autant de langues que l'homme sçait parler, autant de fois est il homme*, for every language that a man learns he multiplies his individual nature and brings himself one step nearer to the general collective mind of Man. The effect of learning a language, then, consists in the contrast of the associations which it calls up to those trains of thought which our mother tongue awakens. In this again the dead languages possess a great advantage over every living one. It has been well remarked “that our modern education consists in a great measure in the contrast between ourselves and classical antiquity¹”; it is a contrast produced by a sleep of more than a thousand years between the last of the great men of old and the first of the great moderns when the reawakened world looked with instructive astonishment upon its former self.

In addition to the two reasons which we have stated as grounds for preferring the two classical languages as materials of grammatical study, there is a third reason which has generally been thought to be alone sufficient,—the value of the literature to which they are a key. On this particular subject we do not intend to dwell; books without number have been written upon it, and there does not seem to exist a doubt as to the paramount excellence of the Greek and Latin writers. To those who still argue the old question about the comparative merits of modern and ancient literature it is sufficient to answer that if the old classical literature were swept away the moderns whom they so admire would in many cases become unintelligible and in all lose most of their characteristic charms².

1. W. von Humboldt, *über die Verschiedenheit des menschlichen Sprachbaues*, p. 27.

2. See Sedgwick, *Discourse on the Stu-*

dies of the University, 4th edit. p. 36; and Whewell, *On the Principles of University Education*, p. 35.

Lastly, the introduction of that branch of philology which we call comparative grammar offers a great recommendation to the careful study of these two languages. Notwithstanding the beneficial contrast which they present, they are aged sisters of our own mother tongue, and, studied according to the true philological method in combination with the Asiatic members of the family, they open the way to an easy and speedy acquirement of every one of the Indo-Germanic languages and are thus a key to the greatest treasure which the mind of man has collected,—the recorded wisdom of the Caucasian race.

From what we have said it appears that for the mental training of the individual some philology is necessary; that grammar is best studied through the classical languages; that the study of these languages is also recommended from their contrast to our own, from the value of the literature to which they are the key, and from their place in the family of languages to which our own belongs. These are reasons why the individual who is to be *liberally* educated, should study Greek and Latin. But the advantages of philological studies are not confined to the individual. They may be cultivated to a higher degree than is necessary for the mere purposes of education, and be made to contribute to some of the most valuable and interesting branches of human knowledge. We speak here of the etymological branch of philology which is the subject of this work—of the utility of logic farther than as a part of education we do not think it necessary to speak in this place. We shall confine ourselves to two of the applications of Etymology; Ethnography and Theology.

There is in fact no sure way of tracing the history and migrations of the early inhabitants of the world except by means of their languages; any other mode of inquiry must rest on the merest conjecture and hypothesis. It may seem strange that any thing so vague and arbitrary as language should survive all other testimonies, and speak with more definiteness, even in its changed and modern state, than all other monuments however grand and durable. Yet so it is; we have the proof before us every hour. Though we had lost all other history of our country we should be able to tell from our language, composed as it is of a substratum of Low German with deposits of Norman-French and Latin, the terms of war and government

pertaining to the former of the superinduced elements, the terms of Ecclesiastical and Legal use to both of them, that the bulk of our population was Saxon and that they were overcome and permanently subjected to a body of Norman invaders, while the Latin element would shew us how much that language had been used by the lawyers and churchmen. We know too that the inhabitants of Wales, of the Highlands of Scotland and of the Isle of Man speak a Celtic dialect, and from the position of these people we should infer that they were the earliest inhabitants of the island and were driven into the mountains by the Saxon invaders. Even the names of places would tell us as much. When we hear a stream called Wans-beck-water and know that the three words of which the word is made up all signify "water," the first being Celtic (as in *Wan's-ford*, *A-von*), the second German (*beck*=*bach*), the last English, we at once recognize three changes of inhabitants to whom the former name successively lost its significance. It has been the same with other countries also. Persia, for instance, has been under the dominion of Mohammedan conquerors for twelve hundred years, and we find an immense number of Arabic words naturalized in the country, but the language which forms the basis of the whole, and the general organization and grammar, are as entirely Indo-Germanic as if the country had never had any intermixture of an Arabian population. The study of language, therefore, in its wider range may be used as a sure means of ascertaining the stock to which any given nation belonged, and of tracing the changes of population and government which it has undergone. It is indeed perfectly analogous to Geology; they both present us with a set of deposits in a present state of amalgamation which may however be easily discriminated, and we may by an allowable chain of reasoning in either case deduce from the *present* the *former* condition, and determine by what causes and in what manner the superposition or amalgamation has taken place. The excellent historian of the inductive sciences¹ would group these and other speculations together in a separate class, considering them all "as connected by this bond, that they endeavour to ascend to a past state of things, by the aid of the evidence of the present." He would term them *palætiological* (meaning we presume *palæ-ætiological*), but

1. Vol. III. p. 481.

we do not like the word; if we must have a Greek name for the class it would be better to call it *archæography*, as distinguished from *archæology*, on the analogy of *geography* and *geology*, though it must be admitted that the opposition is interchanged, and that the existing term *archæology* corresponds to the former rather than to the latter of the other two words. In this class of sciences, then, by whatever name designated, comparative philology in its ethnographical application is entitled to a prominent place.

Of the importance of philology, as the method of interpretation, to the theologian it is unnecessary to speak: as far as theology is interpretation or exposition it is but a branch of philology. We speak here of the effect of philology in establishing the grounds of revelation. We are told in the Sacred Writings that the first inhabitants of this world were a single pair, and that by the transgression of this pair the whole race of mankind were reduced to that fallen state which the Christian dispensation was designed to remedy. Consequently, all the truth, or, at least, all the intelligibility of the Christian dispensation, depends on this fact of an original pair. Now this pair of course spoke one language and this language was, after the deluge, broken up into a number of idioms by a miraculous dispersion of the then inhabitants of the world: but we are not to suppose that the original Adamite language was abolished, and that all these varieties were so many new creations: on the contrary, we should expect, that, however different these tongues might become by the dispersion and incongruous habits of the speakers, there would still be traces of a common origin. It is the tendency of philology to establish this. We are already so far advanced as to be able to divide all the known languages of the world into three classes, and although we do not yet possess sufficient knowledge of the whole body of languages to be able to say what affinity exists between the three great divisions, approximations have been made to the conclusion that there are certain points in which they osculate, and, judging from the progress of linguistic studies hitherto, we may fairly hope that, as in the case of languages now known to be cognate we were impressed with the differences long before we perceived the similarities which are now the most prominent features, so it will be hereafter with all the languages of the world, and reason

will fully confirm what the great apostle proclaimed in the Areopagus, "that God has made of one blood every nation of men, that they should dwell upon the whole face of the earth, having determined the particular times, before appointed by his divine wisdom, and the boundaries of their respective habitations"—
 ἐποίησέ τε ἐξ ἑνὸς αἵματος πᾶν ἔθνος ἀνθρώπων, κατοικεῖν ἐπὶ πᾶν τὸ πρόσωπον τῆς γῆς, ὀρίσας προτεταγμένους καιροὺς καὶ τὰς ὁροθεσίας τῆς κατοικίας αὐτῶν. (*Act. Apostol.* xvii. 26).
 Thus much may be expected from comparative philology. The philosophy of grammar, however, has already gained one decisive victory over scepticism, in demonstrating from the organization of language the impossibility of the hypothesis, maintained by many, of the human invention of language, and a progression from barbarism to metaphysical perfection. In this point the conclusions of our science are identical with the statements of revelation¹.

On the whole then it may be asserted, that philology is essential to a liberal education, and useful as a branch of science. We do not, however, maintain that every one should make himself a scientific philologist. In the first place, it is not every one who is qualified by capacity and taste to become a scholar: some particular faculties are needed for the successful study of dead languages, as well as for a profitable employment of one's time in the docks of London and Liverpool, or in the manufactories of Birmingham and Elberfeld: it is also a question of time, for no one can make himself acquainted with the wide range of subjects which philology in its scientific cultivation includes, so thoroughly and perfectly as to become a competent teacher of immediate learners and by his writings of the world, without years of patient study and earnest thought; in a word, he must make philology his profession, and if his fellow-men set any value upon his labours he will live by this as he might by any other business. But in a civilized state of society every one ought to learn so much of philology, that is, he should have such an acquaintance with the vehicle of his thoughts, as may enable him to acquire a habit of method in the way of practical teaching. The mistake into which we have fallen in this country does not consist in our making classics and mathe-

1. See Dr Wiseman's *Lectures on the Connexion between Science and Revealed Religion*, and below Chap. III.

matics the basis of our education nor even in obliging all to attempt what few can attain to, but in making boys learn by rote like parrots instead of learning by reflexion like men. We repeat that man is a thinking being, and that his education as such consists in giving him a power and a habit of arranging his thoughts. The learning of Latin and Greek is profitable so far as it is made a lesson on the analogy of language, and we are convinced that the youth of this country would gain more from two years exercise in the rigorous discrimination of the like and unlike in the Greek language alone, than by spending ten years, as many do, in overloading their memory with a mass of crude facts, into the chaos of which the untutored intellect cannot penetrate. And, if one's profession is to be that of a scholar, he will not be the longer in getting to the end of his journey, because he has spent more time than some of his fellow-travellers in making himself thoroughly acquainted with the route.

We now proceed to inquire, what is the state of scholarship in reference to the objects which give it importance and value.

CHAPTER II.

THE HISTORY AND PRESENT STATE OF PHILOLOGY.

To form a proper estimate of the present condition of philological knowledge, we should at least be acquainted with the circumstances in which the study originated, and with the principal changes which it has undergone up to our time. An adequate discussion of this subject would, however, far exceed the limits of an introductory chapter: all that we propose to attempt in this place is to point out as briefly as possible the most prominent and striking features that have marked the progress of those grammatical and critical studies which constitute our modern scholarship.

The importance which, for the last three hundred years has been attached to philological studies, is at once accounted for and justified by that cessation of all literary exertion for a long period, which ensued upon the overthrow of the Western Empire. The rude vigour of barbarism had triumphed over the languishing energies of civilization, and it seemed as if the last rays of mental culture had faded away in the prison of Boethius, as if some sudden paralysis had seized upon the general mind of Europe, as if men had drunk of the waters of oblivion, or had lost irrecoverably the key to those treasures of learning, wisdom, and genius, which the old world had amassed for their use. Rapid as was the downfall of literature, it must be recollected that many causes had been gradually operating to produce it, some of which continued their agency to prevent its revival. Among these not the least efficacious was the influence of the Romish Church, the subjection of the less cultivated laity to the growing power of the clergy, and the prejudices which these last entertained, as well from motives of interest as from scruples of religion, against the learning of the heathen world, so that after the crisis had taken place the church carefully appropriated to herself the little learning that still struggled for existence, and the papal authority was

openly opposed to the diffusion of secular knowledge. Accordingly, when, notwithstanding this utter prostration of mental culture, the literary spirit revived after nearly a thousand years of darkness or doubtful light, and the mind awaking like Epimenides from its long slumber found all things altered but itself, men turned eagerly to the written monuments of the former waking and thinking world, and the grammatical studies necessary for the understanding of these works constituted that philology or scholarship which has ever since formed the basis of education.

As the Romish Church throve by the ignorance which it fostered, it fell by means of the learning to which it had always been opposed. The causes which produced modern scholarship were identical with those which brought about the Reformation of religion. Of these the most important were the three following: the overthrow of the scholastic realism, and the introduction of rationalism or a philological spirit by the Nominalists: the reproduction of the classical authors in Italy, and the revival of the study of Greek, which created a learned class in Europe: and the invention of printing, which by multiplying books imparted to the bulk of the laity the effects of the two former causes, the rationalism and learning of the thinking part of mankind.

It will be proper to make a few remarks on each of these causes.

The grammatical studies which the Romans had borrowed from the Greeks, and which they had reduced to such an excellent system, were utterly lost in the dark ages. If one needed a proof of this, it would be sufficient to refer to the fact that the languages of those nations, which had been most exposed to the influence of Roman literature, and which had for the most part adopted the Latin idiom, degenerated into a barbarous jargon without inflexions or syntax. A certain amount of education was necessary for the clergy, but, though *Grammatica* formed a part of the *trivium* in the seven arts which were then taught, this term did not signify rational grammar, but merely an acquaintance with the Latin of the schools. The nature, however, of some of the popish doctrines necessitated a mixture of metaphysics with theology. In this mixture originated the scholastic philosophy, which was simply an attempt to

prove by what they knew of Aristotle's logic the necessary union of reason and orthodoxy. It was only by such an instrument as the quasi-realism of their Aristotle, that they could establish those points of faith which constituted the difficulty of the Romish creed. It was necessary that the mere abstractions of common language should be considered as objective realities, for it was about these abstractions alone that they argued; and, as there were some clear-headed men among them who could not accept this position, there arose a dispute in the schools, of which the real point under discussion was whether the scholastic philosophy had any basis or not. This dispute is commonly known as the question about Universals, or the controversy between the realists and the nominalists, the former of whom considered universal ideas as pre-existent in the mind of God and man (*ante rem*), and the latter as simple abstractions of the understanding from the objects of the senses (*post rem*). Now as it was about these universals alone that the scholastics reasoned, it followed, that, if the universals were mere words, they could not pretend to establish anything by their argumentation, and consequently the whole system would be overthrown. We can, therefore, easily understand why the nominalists were so violently persecuted, and why they were considered as little better than heretics, for, if orthodoxy rested upon scholastic realism, those who undermined the one contributed not a little to the downfall of the other. Roscelinus, the first opponent of the realists, went into the opposite extreme of ultra-nominalism¹, and as he was confuted without much difficulty by Abelard and the other conceptualists, his efforts did not avail much to the overthrow of the system. It was reserved for our countryman, William of Ockham, to effect this; without running into any paradoxical absurdities he showed in a straight-forward manner that words are instruments of reasoning, not objects of science, and set up the grounds of rational grammar against realism, which had overlooked the fact that logic has nothing to do with the particular significations of words, but only with their methodical arrangement.

1. We apply this term to the doctrines of those philosophers who, like Cratylus, Hobbes, and Horne Tooke, not only reduced

universals to mere names, but even made truth to consist in names, for which reason Leibnitz has called Hobbes *plusquam nominalis*.

The Nominalism of Occham, however, was not merely a reassertion of grammar, it was an overthrow of that worship of words which was so important a part of the idolatry of the time. As it is one of the objects of this work to maintain the views which Occham advocated, against the ultra-nominalism which now and then makes its appearance, we shall offer no apology for giving a statement of views so much in accordance with our own as his are; at the same time it is but due to the sturdy Franciscan, who is little thought about by the thousands who are reaping the benefit of his labours, to give as nearly as possible in his own words the important principles which he so opportunely revived, and by which he earned the titles bestowed upon him by his editor Marcus de Benevento—*logicorum acutissimus, sacræ scholæ invictissimorum Nominalium inceptor, in omni disciplinarum genere Doctor plusquam subtilis*. It will be sufficient to give the statements in his *Summa totius logicæ* (Venet. 1522), one of the best of his works, and indeed one of the soundest treatises on the philosophy of syntax which have come to our knowledge. Arguments and syllogisms are made up of propositions, and these again of terms. Of terms there are three kinds, (1) that which is conceived, (2) that which is spoken, (3) that which is written: the two last are parts of a proposition meant to be heard by the bodily ear or seen by the bodily eye; the first is merely an intention or affection of the mind signifying or consignifying something as a part of a mental proposition¹. We say that words are signs subordinated to the conceptions or intentions of the mind, not because, in the strict acceptation of the term “sign”, words primarily and properly signify the actual conceptions, but because words are imposed to signify those very things which are signified by the conceptions of the mind: for the word signifies secondarily what is primarily signified by the conception, and is instituted to denote something implied by a conception, so that if the conception changes its meaning, the word would also change its meaning unless it were altered to suit the change in the conception. The intention, conception, or affection of the mind, is defined to be something

1. Cap. I. fol. 2. *Terminus conceptus est intentio seu passio animæ aliquid natu-*

raliter significans vel consignificans, nata esse pars propositionis mentalis.

in the mind naturally signifying something¹. As writing is the secondary sign of speech, so speech is the secondary sign of the intention or conception, which is the primary sign of the thing signified as forming a part of a mental proposition, *which belongs to no particular idiom*². An intention is either primary or secondary: primary, when it is the mental representative of the thing signified; secondary, when it is a sign of such primary intentions: genus, species, &c. are secondary intentions³. With regard to universals, under which are included the five predicables, genus, species, difference, property and accident, he adopts Avicenna's definition with the following explanation⁴—an universal is a single intention of the mind made to be predicated of many not for itself but for the things themselves, and because it is thus predicable of many it is called universal; but it is called singular because it is one form really existing in the mind. Of the arguments which Occham advances to prove that an universal is not a substance, it will be sufficient to mention one. This intention which we call an universal is a perfectly arbitrary sign, for this is the only thing that is predicable of many. Substance, however, cannot be thus predicated, otherwise a proposition would be composed of particular substances. Now a proposition is either mental or spoken or written. But these are not particular substances. Therefore no proposition can be composed of substances. They are however composed of universals. Therefore universals are not substances. Occham says the same of the categories or predicaments⁵.

It is obvious from the way in which Occham speaks throughout his logic that his object was to draw a strongly marked line of distinction between the method of language, as the instrument of deduction, and the science or truth of things. By doing so he not only overthrew the scholastic theology,

1. Cap. XII. fol. 6. *Intentio animæ vocatur quoddam ens in anima natum significare aliquid.*

2. *Propositio mentalis quæ nullius idiomatis est.*

3. *Stricte vocatur intentio prima nomen mentale natum pro suo significato supponere. Intentio autem secunda est illa quæ est signum talium intentionum primarum: cujusmodi sunt tales intentiones: genus, species, &c.*

4. Cap. XIV. fol. 6, 2. *Vult dicere quod universale est intentio singularis ipsius animæ nata prædicari de pluribus non pro se sed pro ipsis rebus: ita quod per hoc quod ipsa nata est prædicari de pluribus non pro se sed pro illis pluribus illa dicitur universalis: propter hoc autem quod est una forma existens realiter in intellectu, dicitur singulare.*

5. Cap. XLI. fol. 13.

but also laid the foundation for that system of interpretation which became philology in the hands of the scholar: and therefore it was not without reason that Luther, who so well estimated the importance of grammatical studies to the ministers of his Reformation, paid so much attention to Occham while he neglected and despised the other schoolmen. Indeed it appears from Luther's early works that he had embraced very heartily the Occhamistic nominalism.

The overthrow of the scholastic philosophy, however, though good in itself, would have had but little effect in dispelling the darkness of the middle ages had it not been for the classical enthusiasm of the poet Petrarch, and the subsequent exertions of Poggio Bracciolini, who laboured incessantly, and to a certain extent successfully, in saving and bringing to light the remains of the great Latin writers. The increased study of pure Latinity produced by the gradual diffusion of these books naturally induced a desire to become acquainted with the sister literature of ancient Greece, which the overthrow of the Eastern Empire by the Turks accidentally favoured, as those of the Greeks who had retained a knowledge of their ancestors' language hastened to Italy, where the patrons of learning offered them protection and reward. For some time, however, the number of Greek scholars was very limited, and nothing was done for scholarship beyond the translation of Greek authors into Latin, which, as the performers were mostly modern Greeks who were indifferently acquainted with Latin, and had but a traditional knowledge of the language of their ancestors, have little to recommend them beyond the merit of the attempt. But although the influence of the new learning was but limited, still a beginning was made, a learned class was formed, comparisons were inevitably suggested between the enlightened views of the old world and the ignorance of the day, and the first seeds were sown of that freedom of inquiry which shook the papal throne and changed the destinies of the world.

The third and greatest cause of the revival of letters was the invention of the art of printing, which by the multiplication of books spread the influences of revived learning over the whole of Europe, and, it is not too much to say, produced immediately and at one birth the Reformation and Philology. This inven-

tion is due to Germany or to the Low countries, and though it must not be overlooked that its immediate effects and its application to the diffusion of classical learning were first felt in Italy, yet the origin of philology or sound scholarship is to be sought on this side of the Alps; its beginner was Reuchlin, a German; the two men who brought it forward most prominently and tangibly were Budæus, a Frenchman, and Erasmus, a Dutchman; and the combined influences of scholarship and printing were developed in Germany by Luther, and Melancthon, a kinsman of Reuchlin. Under the more immediate influence of the papal chair, and shrinking from German sway with all the aversion produced by their historical recollections, the Italians were not likely to be affected by that free spirit of inquiry which had been for some time at work among the Germans and which seems to be still their natural characteristic. It was, however, to this free German spirit, and the materials furnished to it by the revival of letters in Italy and the invention of printing among themselves, that we are to attribute the great German Reformation. Luther himself has said as much¹, and we see that, in the expression of their alarm at the probable effects of printing, the catholic hierarchy of the time had reference to Germany alone².

Intimate, however, as was the connexion between the rise of philology and the reformation, it cannot be denied that the country which gave birth to the latter was for many years afterwards far behind other countries of Europe in its cultivation of the former. Nor shall we wonder at this when we recollect that all intelligent Germans who embraced the principles of the Reformation were absorbed in theological studies, and that in consequence of the religious differences which were produced by this engrossing change, Germany became one great battle-field and was prevented from attaining to a full literary developement till after the results of the thirty years^{war} had restored peace and tranquillity to the Protestants.

The connexion of France with Italy, in consequence of the ambitious projects of Charles VIII. and his successors Louis

1. In his 239th letter (Pars I. p. 464 Wette), where he talks of *Germanorum ferocia ingenia quæ, nisi capta sint Scripturis et Ratione, non est vel multis Papis irritare tutum; præsertim hoc tempore,*

ubi in Germania regnant literæ et linguæ et sapere incipiunt Laici.

2. See the Proclamation of the Archbishop of Mainz in 1486, quoted by Hallam, *Literature of Europe*, Vol. I. p. 348.

and Francis, made the former country an important instrument in the diffusion of the learning revived in the latter. The first approach to really accurate scholarship is due to Budæus (Budè) and the family of the Stephens' (Etienne), who brought the knowledge of Greek and Latin to a point of perfection which has induced many to believe that there was little more to be done by the modern scholar than to study the commentaries of the former and reprint the Thesaurus of Henry Stephens. Their successors, Casaubon and Salmasius, exhibit in their works an extent of reading and an accuracy of scholarship which few of modern philologists can rival, and Joseph Justus Scaliger, who, though of Italian extraction, must be reckoned among the glories of French literature, may fairly be considered as still entitled to precedence above all scholars, Bentley, perhaps, excepted¹. Even Muretus, who was the most learned man in Italy at this time, was a French emigrant.

Our own country occupies a very distinguished place among the first promoters of philology; Erasmus taught Greek at the University of Cambridge as early as 1510, and many of our native scholars were sought as instructors in Germany and elsewhere on the continent.

The noble demand of the citizens of Leyden, that an University might be established there as a reward for their heroic defence in 1574, led to the institution of many similar establishments in the country, and to the foundation of a school of philology which in accurate knowledge and extensive reading soon left the rest of Europe far behind.

Whatever may be the merits of these different countries, the progress of scholarship was every where the same. At first the object was to publish as many of the Greek and Latin authors as they could collect, to supply them with Latin versions, and with such commentaries as might help the less perfect scholars to an understanding of the grammatical construction of the text, and the various allusions contained in it. To further this object collections of miscellanies or *variae lectiones*, as they were called, were from time to time published by different scholars. As grammatical knowledge advanced, the editors were induced to remark the corruptions of the texts, produced by the ignorance of those who had copied the manuscripts in the dark ages, and

1. See the remarks of Niebuhr, *Hist. of Rome*, Vol. I. note 660.

from this verbal criticism arose. But in all that was done for nearly a hundred years after the death of Scaliger, we perceive a want of method combined with much individual industry, nor do we discern any marks of commanding genius in the many who directed their attention to the elucidation and correction of ancient authors: they passed their time in polishing the ancient authors and abusing one another, and like the rhapsodes of old while they corrected their authors they needed much emendation themselves¹. The real beginning of a more enlightened scholarship is due to Bentley, whose unrivalled ingenuity and boundless learning enabled him not merely to correct the words of the ancient writers but also to apply his intelligent criticism to the literary history and antiquities of Greece and Rome. His actual performances and the example which he set to those who came after him cannot be too highly estimated. In verbal criticism he found most able successors among his own countrymen: Dawes, Markland, Toup, Tyrwhitt and Porson, who followed in his steps, have advanced this department of scholarship to its utmost limits. Meanwhile the scholars of Holland were not idle, and to them we owe a most accurate examination of the old Lexicographers and a collection of every thing that could contribute to the illustration of what they advance: besides, the first step in the systematic etymology of the Greek language was taken in that country, and, though the principles on which the understanding was based were not sufficiently well founded, the attempt was not unproductive of benefit.

The Germans did not contribute much to the advancement of philology before the end of the seven years' war. Their general literary condition was very low, as may be discerned from the fact that the few great authors whom they had at this period, for instance Leibnitz, usually wrote either in Latin or French. When, however, they were released from the distractions of war and turned themselves in earnest to read and write, they shewed that the active spirit which had made Germany the scene of the Reformation was still alive among them, and they advanced with such giant steps that within a century they had placed themselves at the head of literary and learned Europe.

1. Τοὺς μὲν γὰρ ῥαψωδοὺς οἶδα τὰ ἡλιθίους ὄντας (Xen. Mem. IV. 2, μὲν ἔπη ἀκριβοῦντας αὐτοὺς δὲ πάνυ § 10).

About the middle of the 18th century Gesner and Ernesti came forward as prominent philologists in Germany, but their style of scholarship had little in common with that of their countrymen at the present day, being rather formed on the model of the Dutch school; indeed the two most learned Germans of this time, Ruhnken and Drakenborch confined the sphere of their usefulness to the Universities of Holland. The beginning of German, or, to use a more comprehensive but synonymous term, of modern scholarship, is to be referred to Lessing who created German literature by casting off the trammels of the French school, and to Winckelmann who laid the foundations of the archæology of art, a most important application of philology in the wider sense of the word. The successive appearance of the literary giants Wieland, Herder, Schiller, Göthe and Richter, who were all to a certain extent contemporaries, and the searching philosophy of Kant, which arose at the same time, furnished the active intellect of Germany with abundant materials for speculation, and the people became at once remarkable for bold theories and uncompromising inquisitiveness. This was not long without its effect upon scholarship which as we have said existed among them as an offshoot of the Dutch school, and German philology properly so called arose with Heyne. The difference between him and his predecessors consisted mainly in this, that he did not limit his investigations to the narrower field of the ancient authors, but combined with it all the newly applicable resources of the archæology of art, of the principles of taste, and of literature in general. In fact the line of demarcation between literature and learning no longer existed for the Germans. We see this in the acknowledged influence of the translations of Voss, in the classical spirit which pervades all the great German writings, and indeed even in the adoption of classical metres for vernacular poems. The school which Heyne founded was combined with a revival of the Bentleian spirit in the person of F. A. Wolf, a man of the most purely literary genius that ever marched with the heavy baggage of book-learning. Whether he owed any thing to Vico or not, he must certainly be considered as the literary descendant of Bentley, and his treatise on Homer produced an effect upon scholarship analogous to that of the Dissertation on Phalaris. It is no disparagement to the undeniable genius and prodigious

learning of Neibuhr to say, that the History of Rome, the masterwork of historical criticism which will ever mark our age as distinguished in the annals of literature, is due in a great measure to the example of Wolf, and we may join the illustrious Historian of Rome in hailing him as the Hero and Eponymus of the race of German philologers¹. But with all these wonderful extensions of the domain of philology the Germans were not inattentive to the details. The early works of Buttmann and Hermann² placed the study of Greek grammar on an entirely new footing, and the Dictionaries of Schneider and Passow constitute an epoch in the department of Lexicography. Lobeck has proved himself a worthy successor of Hemsterhuis and Ruhnken. The editions of classical authors published by Spalding, Heindorf, Böckh, Dissen and others are a proof that the more enlarged views of the age have not been without their influence on the old system of note writing, and the overthrow which Hermann has recently experienced in his opposition to the more extended views of Müller and Welcker is a proof that philology has, in Germany at least, taken its place among the subjects of general literature. In addition to the causes enumerated above a great and immediate influence is attributed³ to the new system of interpretation introduced by Schleiermacher, a most distinguished metaphysician and divine, who commenced at the beginning of this century a complete translation of Plato arranged according to a comprehensive view which he had taken of the general connexion of thought and mutual dependence of the separate dialogues: perhaps few German books are a better example of the influence of the general literary spirit on philology⁴. In other fields equally important advances were made. The connexion of philology with the study of the civil law produced a most striking effect on the latter, and a fortunate discovery of the fragments of Gaius has given an entirely new complexion to the History of jurisprudence: in this department Savigny stands foremost as the greatest of lawyers and one of the greatest of philologers. But we should far exceed our limits were we to particularize

1. *Rheinisches Museum* for 1827, p. 257.

2. Buttmann's Greek Grammar, first published in 1782. Hermann *de emendanda ratione Græcæ Gramm.* Pars I. Lips. 1801.

3. See Dissen in Böckh's Pindar, Vol. III. p. 7.

4. See the *Journal of Education*, Vol. IX. p. 118, foll.

the different German authors who have written first rate books on mythology, geography, or art. Suffice it to say, that by the exertions of the Germans alone philology has made more progress in the last fifty years than in the preceding two hundred. It was not, however, to be expected that such a sudden advance should be made without some corresponding disadvantages. And here we may be permitted to make a few general remarks on the merits and defects of German literature. The merits of the German writers may be inferred from what we have already said. They have a large share of originality; great honesty and consistency of purpose; indefatigable industry; and an entire freedom from prejudices and one-sided views. Their defects, so far as they are constitutional, arise from the excess of those qualities which constitute their chief merit: they are liable to give way too much to their imaginative enthusiasm: like the student Anselmus, in Hoffmann's tale¹, they are fascinated by the dark-blue eyes in the elder-bush, and the crystal bells are ever sounding in their ears. The circumstances under which their literature so rapidly created itself has also produced its evils: every young man who has any pretensions to learning or ability feels himself called upon to write something new: the result of which is, that without sufficient sobriety of mind to keep them from error, their disposition leads them continually to make rash attempts upon subjects which ought never to be treated without the greatest care and circumspection, so that they have given much scandal to people of more timid minds, and created prejudices against that freedom of investigation which when soberly exercised is at once the most imperative duty and the highest privilege of civilized and educated men. There is perhaps no literature in the world which furnishes so decided, so strongly marked a contrast as the German does between the first and second rate authors: which, while it presents to us more of the true and the valuable, more that is kindled into sunlike splendour by the fire of genius, more that is arrayed in the secure panoply of learning, more that is dressed in the gaudy but not inelegant trappings of a rich and luxurious fancy, can yet on the other hand display so much frigid pomposity, so much flippant ignorance, and so much audacious dulness. True it is we have but few of the first class among our writers:

1. *Der goldne Topf.*

but then how very few we have of the second. The same principle of cautious reserve or of a persevering pursuit after the profitable, which has doomed to the desert air many a glowing thought and many a golden truth, has also saved us from sundry proofs of the danger of trying to be ingenious, and has deterred many a literary Curtius from leaping into the gulph, ever open in the forum to swallow up those whose destiny it is to write and be forgotten. Another feature in the German literary character is the air of consciousness and pretence with which the great bulk of writers bring forth their works. The mark of real originality is, that the author is before his age. The great writer, through his own modesty, is generally the last to discover this, or, perhaps, through the tardy appreciation of his contemporaries he is left in ignorance of the great service he has done; like Spenser's Chrysogone, he has unawares conceived and borne children of the sun, and they lie unheeded by the parent's side in some rude wilderness untrodden by men, till the goddess of Beauty claims them for her own and rears them in her own fair garden that they may hereafter delight and teach mankind¹. The Germans, on the contrary, make genius a trade, and do not scruple by themselves or their friends to point out, to those who have not the wit to discover it, the value of their wares. It is part of the same principle that a German will never acknowledge his errors: his reputation for infallibility is dearer to him than the truth. To take an instance from our own field: Hermann has praised our excellent Elmsley for his candour and willingness to admit his mistakes: when has he followed his example? These it must be confessed are serious drawbacks. Nevertheless, all honour be to the Germans, for they have made the mind of Europe what it is; and, though much that many a one of them has written is neither wise nor true, though now and then we may meet with something which staggers us even in the pages of the wisest and most true-hearted among them, yet let all those who love knowledge and admire genius apply themselves diligently to the treasures of German literature and scholarship, with caution indeed lest they mistake dross for pure gold, but yet with earnestness of purpose and with a full confidence that if they seek aright they will not be disappointed.

1. *Faerie Queen*, Book III. Cant. vi.

The names of the verbal critics who succeeded Bentley in this country have been already mentioned: in their performances is included all that was done by Englishmen for the scholarship of the 18th century. The very limited nature of the instructions given at the classical schools at that time, and the insufficient learning of the masters necessitated some arbitrary method of employing the ten years which it was thought right to spend upon Latin and Greek. The principle of competition which was introduced very early in this country, and the facility of determining the relative merits of such exercises, induced the masters of the schools to direct their attention principally to the composition of Latin and Greek verses, which had been the amusement of scholars at the revival of learning, or perhaps the custom was derived immediately from these early scholars together with the grammars which so long maintained their place in our principal schools. The effect of this narrow range of reading incapacitated our scholars from making any real advances in philology, while the great facility of verse making, which every one brought up to the University with him, was a very good preparative for the application of verbal criticism to the correction of the ancient poets. Hence we find that, in knowledge of the old metres, and in conjectural emendation, the scholars of this country were always infinitely superior even to the most learned of their continental contemporaries. The last great scholar of this sort was Porson, who was indeed a man of very decided genius, and, though he lost himself in trifles unworthy of his power, it must be admitted that, in the little which he directly contributed to Greek learning, he showed a knowledge of the language in all its details, to an extent which can hardly be surpassed. The great mischief of which he is guilty was not so much in omitting to do all that he might have done, though this is deeply to be regretted, but in investing with exclusive importance a merely subordinate branch of Greek philology, and thus creating a school of criticism in England which has stood seriously in the way of our philological progress. At the termination of the war with Napoleon a very great change took place in the intellectual state of the better classes in this country. Excluded as we had been, more completely than at any former time, from all intercourse with the continent, we were suddenly seized with a mania for foreign

travelling; Englishmen were to be met with in every corner of the world; an acquaintance with other languages was no longer thought wonderful; and in the process of time many returned home impressed with the novel conviction that there was something good out of England. This influence of foreign intercourse was felt latest in its effect upon classical scholarship; the prejudice against German scholars, which Porson's quarrel with Hermann had produced, and his authority with his imitators kept us for some years after the peace in the same state as before it, and the pert mediocrity of the *Museum Criticum* was the only representative of our philology: some of Porson's successors, especially Elmsley, were able critics, and accurate collectors of minutiae, but not philologists. At length, in 1819, Mr Valentine Blomfield's translation of Matthiæ's Greek Grammar made its appearance, and its great superiority to any thing of the kind which we had in England soon recommended it to general use; this work and the German editions of classical authors, which were now imported in considerable numbers, began to wean us from our unreasonable prejudices against the scholarship of other countries. In 1824 appeared the first part of Mr Clinton's *Fasti Hellenici*, the most important work which had been published in this country since Bentley's time, and the number of editions of classical works, variorum editiones, reprints of old Lexicons, &c. which appeared about this time were a sufficient proof of a reviving spirit of philology. The most important services, however, were performed by the almost simultaneous appearance of translations of Niebuhr's *History of Rome*, of Böckh's *Public Economy of Athens*, and of Müller's treatise on the Dorians. In fact English scholarship became every day more and more germanized, to such an extent that our philologists hardly dared think for themselves. The establishment of an English school of philology is to be referred to the opening of the London University in 1828 (the year in which the second translation of Niebuhr appeared), and may truly be ascribed to the mode of teaching adopted by the first Greek Professor at that institution. It would be impertinent to speak here of the various labours of this scholar, but it is right to mention that to him and to his colleague in the Latin chair we owe the first application of comparative philology to the public teaching of the classical languages: with what important consequences we

might easily say if the good example had been more generally followed. Nor were our other scholars inactive at this period; we believe that a most beneficial influence was produced by Dr Arnold's edition of Thucydides, of which the first volume was published in 1830, and the two periodicals which were established shortly afterwards,—the *Journal of Education* and the *Philological Museum*—at least gave indications of the fact that a truer scholarship, a more comprehensive criticism, and more extended views of general literature were beginning to supersede the meagre, one-sided notions of a few years before. And if we must pronounce an opinion with regard to the prospects of British philology at present, we must needs confess that they are far from discouraging, and that, although there is still much to be done before we can cope with the Germans in this field, there is every reason to hope that the labourers will not long be wanting. Enlightened and accomplished scholars have been placed at the head of all our great schools, so that the stumbling-blocks of prejudice are no longer to be dreaded in that quarter: the Universities, it is well known, have never opposed themselves to any necessary change in the method of their classical studies: and in the histories of Greece and Rome, which are now in the course of publication¹, and which will mark this epoch in the annals of our philology, we may clearly discern what may be expected from an union of the multifarious learning and chastened scepticism of the better class of German scholars with the good taste, sober judgment, and straight-forwardness for which this country is so eminently distinguished.

While classical scholarship has been making this progress in England and on the continent, a new branch of philology has grown up by its side, and is now so matured as to be entitled to a place among its primary elements. This is the comparative study of languages, which, while it also serves as an important instrument in the study of ethnography and early history, seems likely to engross the whole grammatical element of the older philology. It is curious to trace this study back to the time when the first glimmerings of light broke upon the scholars of Europe, when they first saw the little blue flame which pointed out to them the treasures still in the mine.

1. By Mr Thirlwall and Dr Arnold.

Linguistic science began¹ in the examination of the claims of various dialects to be considered as the original language of the world. Most of the earliest inquirers favoured the pretensions of the Hebrew, and, as they proceeded by derivation rather than by comparison, they were obliged to have recourse to a number of very forced etymologies in endeavouring to establish the affiliation of the European languages to a Semitic mother. Even when they perceived the connexion between sundry of the Asiatic and European members of the Indo-Germanic family², as when Lipsius in 1599³ or Salmasius in 1643⁴ made a comparison of modern Persian with German and Greek, they were utterly unable from the want of a wider induction to see the important conclusions to which such comparisons might lead, nor indeed had they any fixed principles to guide them in their search. The first who pointed the true method of proceeding was Leibnitz, whose comprehensive genius seems to have suggested the beginning of almost every improvement in science. This great man saw that the Hebrew had no claim to be considered as the mother of languages, he showed that we must take the widest possible inductions, and compare with one another the languages of nations most remote in geographical position, and that the words to be selected for comparison were the most simple and necessary terms in each language⁵; in fact, he pointed out the course, by pursuing which succeeding philologists have realized most of the hopes which he entertained. But, although the right method was thus suggested, nothing of any great importance was performed till the discovery of the Sanscrit or sacred language of India. The spirited researches of Anquetil du Perron about the middle of the last century had introduced a knowledge of the old languages of Persia, the Zend and the

1. Dr Wiseman has given a more complete history of comparative philology in his first and second lectures.

2. It has been erroneously supposed (Camden, *Britannia*, p. 123; Wilkins in *Chamberlayn. orat. domin.* p. 7) that Joseph Scaliger was the first to notice the resemblance of Persian and German, but although he could not help observing the identity of some very common words in the two languages, he was far from thinking this an argument for a sameness of ori-

gin (*Epistol.* p. 489). If any one preceded Lipsius, it must have been Pontanus, but we are not acquainted with his writings.

3. In a letter to Schott (*Lipsi Opp.* Vol. 1. p. 282 seqq. Edit. 1613).

4. *De lingua Hellenistica Commentarius*, p. 331 seqq.

5. *Otium Hannoveranum*, p. 80; *Collectanea Etymologica et Meditationes de Originibus Gentium* (passim); *Commerc. Epistol.* Vol. III. p. 79; *Nouveaux Essais sur l'Entendement Humain*, p. 243, &c.

Pehlvi, into Europe, but, though it has since been established that the Zend is but a variety of the Sanscrit, no attempt was made to connect the study of Zend with philological researches. Anquetil du Perron himself was no scholar, and people were much busier in endeavouring to settle the claims of the Zend to be at all considered as a language than to profit by it. In the year 1778, however, Mr Halhed published at Hoogly his Bengal Grammar, in the preface to which he remarks (p. III.), "I have been astonished to find the similitude of Sanscrit words with those of Persian and Arabic, and even of Latin and Greek: and these not in technical and metaphorical terms, which the mutation of refined arts and improved manners might have occasionally introduced; but in the main ground-work of language, in monosyllables, in the names of numbers, and the appellations of such things as would be first discriminated on the immediate dawn of civilization." These remarks were followed up and confirmed by Sir William Jones and a German Missionary named John Philip Werdin, more commonly known as the Pater Paulinus a Sancto Bartholomæo. The latter deserves the credit of being the first to publish Sanscrit books in Europe, and to make a formal comparison of the Zend and Sanscrit with the German and Latin, but as he had only a vague acquaintance with the Sanscrit, and did not print his books in the *Déva-nâgarî* or Sanscrit character, he can hardly be said to have been the founder of Sanscrit philology in Europe¹. The real beginning of this study is due to our countrymen in India, who acquired a thorough and critical knowledge of the language from the native Pandits, and made it by their writings accessible to European students. In the first rank of these stand Sir William Jones, the founder of the Asiatic Society at Calcutta; Mr Colebrooke, the author of the first good Sanscrit Grammar, the beginner of Sanscrit Lexicography by his admirable edition of the *Amara-Côsha*, and,

1. Werdin heaped all kinds of abuse upon our Calcutta scholars, and therefore has been somewhat roughly handled by them. Dr Leyden says (Asiatic Researches, Vol. X. p. 278), "his *Vyacarana, seu locupletissima Samscrdamicæ linguæ Institutio*, Romæ 1804, has given a death blow to his vaunted pretensions to profound oriental learning; and shown, as was previously suspected, that he was in-

capable of accurately distinguishing Sanscrit from the vernacular languages of India." And Professor Wilson has pointed out the ludicrous fact that he mistook the *Amara-Côsha*, a common Sanscrit vocabulary, for a ritual and liturgy coexistent with the origin of the Hindu Idolatry and the basis of the Brahmanical superstitions (Preface to Sanscrit Dictionary, 1st Edition, p. 22).

in fact, the Scaliger of Sanscrit Scholarship; Sir Charles Wilkins, the first who printed Sanscrit in Europe, and the author of an excellent Sanscrit Grammar¹; and, finally, Professor Wilson, the compiler of the great Sanscrit Dictionary. From England the knowledge of this language passed into Germany. Frederick Schlegel, who visited this country during the peace of Amiens, learned a smattering of Sanscrit from Mr Hamilton, and subsequently gained further instruction from M. Langlès, at Paris, where, since Anquetil du Perron's time, the Asiatic languages had been cultivated with some success, and whither we must look with the eyes of hope for all such additional knowledge as can be obtained respecting the old language of Persia². The little work on "the Language and Wisdom of the Indians," which F. Schlegel published in the same year with Colebrooke's *Amara-Côsha* and Wilkins' Grammar, was the first to awaken the Germans to a sense of the value of these studies. The establishment of Sanscrit Scholarship as a branch of philology is due to Francis Bopp and Augustus William Schlegel. By the exertions of these two scholars, seconded in no slight degree by the illustrious William Humboldt, a sound and accurate knowledge of the Sanscrit language has been introduced into Germany, and Schlegel, in particular, has brought to the study of the old Indian poems the truly literary spirit and the highly finished taste, which are so conspicuous in his celebrated lectures on the drama and in his inimitable translation of Shakspeare. The interest which the study of Sanscrit has created in Germany results entirely from the greater diffusion of philology in that country, and a wonderful impulse to the study of comparative grammar had been given by the publication of James Grimm's *Deutsche Grammatik*, by far the most important book of the kind which has made its appearance since the revival of letters. By means of this masterwork, and of Bopp's numerous writings, to the efficacy of which the subsidiary researches of Arndt, Vater, Chézy, Rask, Abel-Rémusat, Humboldt, Ritter, the Schlegels, Dorn, Pott, Bohlen, Lepsius, Eugène Burnouf, and Lassen, each

1. The Edinburgh reviewer of this grammar (Vol. XIII.) deserves the credit of being one of the very first of our countrymen who perceived the extensive affinities of the Sanscrit: he has given a comparative table of Sanscrit, Persian, Latin,

and German, which at once established the common origin of these languages.

2. We allude to M. Eugène Burnouf's most meritorious labours in editing and explaining the fragments attributed to Zoroaster.

working diligently in his own way, have in no slight degree contributed, comparative philology has been raised to the rank of a science, the mechanism of the different branches of the Indo-Germanic family has been investigated and explained, the pedigree of the various dialects included in it has been enrolled, and their written monuments have been rendered accessible and intelligible by the application of the sound criticism created and fostered by the classical studies of Europe. England, we are sorry to say, has little to offer that will bear comparison with the performances of our continental neighbours, in regard either to comparative philology in general, or to Indian Scholarship in particular. Indeed, with the exception of the great Colebrooke and Sir Graves Haughton, no one of our Sanscrit scholars can be called a philologer in the higher sense of the word, and even these eminent orientalists have confined their attention to the languages of Asia. Accordingly, as we have borrowed our philology in its literary spirit from the Germans, we must also import their comparative grammar. It is to be hoped that this good work has already commenced. We have indeed lost much by the recent death of Dr Rosen, who, though a German, was by his residence in England, as Professor of Sanscrit in the University of London, almost naturalized among us, and had at all events consecrated his learning and abilities to the service of our philology. But if we may judge from the papers which occasionally appear in our leading periodicals, comparative philology has at length taken root in this country, although it is not yet so widely diffused as it ought to be: Dr Prichard too has made no insignificant contribution to the subject in his vindication of the claim of the Celtic nations to a place in the great Indo-Germanic family¹; Mr Kemble formally enounced the leading principles of the science in his lectures on the history of the

1. "The Eastern Origin of the Celtic Nations," London, 1831. Although we think that Dr Prichard has on the whole proved his point, we must take the liberty of saying, that his little book shows a great want of philological exactitude. He has not attempted to distinguish between those words which the ancient Britons might have derived from the Roman conquerors, or from the Anglo-Saxons who subsequently established themselves in the is-

land, and those which must have belonged to the Celtic dialect from the first. Accordingly, many of his instances, where they are merely comparisons of Celtic with the Latin, or with the German dialects, prove nothing; his strong point is the comparison with Greek and Sanscrit, and his analysis of the pronouns and inflexions, but in this there is still room for a further and more accurate examination.

English language, delivered before the University of Cambridge in 1834; and Mr Winning's recent publication has smoothed the way for those who wish to commence the study of comparative grammar without having recourse to German writers in the first instance¹.

From this survey it will easily be seen what is the condition of scholarship in reference to the higher objects and more extensive applications of which we have spoken in the preceding chapter. To these we need not return: but it is desirable that we should inquire, whether the knowledge which we have recently gained with regard to language in general and the Indo-Germanic family of languages in particular may not now be applied by the classical scholar in gaining a more correct insight into the structure of the Greek language, in classifying more accurately its grammatical forms, and in interpreting more satisfactorily the authors who have written in it. To this inquiry we may add another: whether the general study of comparative grammar as applied to the Indo-Germanic languages would not gain by such an examination of the most perfect member of the family.

The advantages which classical scholarship would derive from a more intimate union with comparative philology may easily be enumerated. The true scholar is of course not merely a student of the Greek and Latin languages and an interpreter of the authors who have written in them. It is his business to lift the curtain which has fallen on the glories of the past: to bring Athens and Rome again upon the stage: to enable the modern reader to regard the old authors and the events of which they write with the eyes of a contemporary. With regard to this latter function the study of comparative philology is of little avail. The Greek and Latin authors must be read together and in connexion, and we must endeavour to peruse them with as little interruption as possible from modern and extrinsic associations. But for the study of the Greek language alone and for the critical interpretation of Greek authors, comparative gram-

1. "Manual of Comparative Philology," London, 1838. The first and second parts of this work, which are composed, in a great measure, of well-selected extracts and translations from other writers, with intelligent criticisms on their opinions, are

worthy of almost unqualified approbation. The third part is rather at variance with the other two, and is deformed by references to Rabbinical authorities, on which we do not set the slightest value.

mar is indispensable. And first, with regard to the explanation of particular passages, in which daily experience teaches us that much remains to be done even after all the labours of preceding scholars. The method of most extensive application is indeed purely a literary one: it is to deduce the meaning of the words in question from a general survey of the connexion of thought in the whole work, and, for the language, in a comparison of the passage with other similar ones in the same or contemporary writers. Cases, however, frequently occur in which the difficulty or misapprehension results entirely from an ignorance of the meaning of some particular word, and though, as Thomas Aquinas has told us,¹ the signification of a word is not identical with its etymology, yet the latter is sometimes essential, on the principle of suggestion, in order that we may arrive at the former, which in most cases will also be determined, *prima facie*, by the context. Now in such cases we must have recourse to comparative philology combined with, and regulated by, the old method of scholarship, and we hope to shew in the course of the following pages that something may be effected by such an union. But secondly, it is also the object of the Greek scholar to anatomize the forms of the words, to classify them according to their etymological coherency, and so to simplify the practical grammar of the language. For this purpose again comparative philology is indispensable. If we were confined to the Greek language we should know absolutely nothing of the principles of its verb-conjugation, of the declension of its nouns, of the value of its particles, and of the real causes of its peculiar conformation. A sufficient proof of this is furnished by the old grammars and lexicons. But after we have once taken up the higher ground of comparative philology our difficulties on these points, be they ever so great, immediately vanish, and our perplexities however intricate are at once unravelled. In consequence of the facility with which all this is effected by the

1. *Aliud est etymologia nominis et aliud significatio nominis. Etymologia attenditur secundum id a quo imponitur nomen ad significandum: nominis vero significatio secundum id ad quod significandum imponitur, quæ quandoque diversa sunt; nomen enim lapidis imponitur a læsione pedis, non tamen hoc significat. Alioquin*

ferrum, cum pedem lædat, lapis esset. Similiter etiam nomen superstitionis non oportet quod significet illud a quo nomen est impositum.—THOMAS AQUINAS *Summa Theolog.* II. 2. *quæst.* 92. *Articulus primus: conclusio ad 2.* (p. 201. Edit. Paris 1631.)

true scholar many who knew little either of the language which they wished to illustrate or of the aids which they sought to employ, have been led to attempt a solution of all the difficulties of Greek Grammar by a comparison with Latin, German, or Sanscrit. It is not to be wondered at that such persons should fall into great errors and incur the just reprobation of mere Greek scholars. At the same time, however, it is not to be supposed, as some of these last have inferred from the failure of the would-be philologists, that he who would increase our knowledge of the Greek language must confine himself to it, and that the study of comparative grammar is rather injurious than beneficial. It is true that an accurate study of the Greek language alone is more profitable to the educated man and to the scholar than a smattering in twenty others: for knowledge which may be made the subject of thought is always better than general information which can only be rendered available for conversation in society. It is also true that our means of elucidating the difficulties of the Greek language from itself alone and independently of comparative grammar, are greater at the present than at any former time. The inscriptions which have been lately collected and explained, the remains of Greek grammarians and lexicographers which have been published from manuscripts in the various public libraries of Europe, and the labours of Lobeck and others in examining the forms of the Greek language as they appear in the whole range of authors, would have enabled us to arrive at more accurate conclusions, than was before possible, with regard to the earliest state of the Greek dialects, even though the other languages of the Indo-Germanic family had been unknown or neglected. But, though the comparative philologist would be much to blame if he failed, as some have done, to avail himself of these and similar resources, those are not to be listened to who would tell us, on the other hand, that the mere Greek scholar is more to be trusted than one whose studies, while equally accurate, have taken a wider range. It is as if a man, who might illuminate a room with a number of lamps, should find out that some one of them gave more light than any one of the others, and should therefore content himself with this one alone. The industrious observer of phenomena in the Greek, or any other language of the family to which we refer, is but a hewer of wood and a drawer

of water for the architectonic philologist: he brings some of the materials necessary to the work, but cannot lay claim to any share in building up the mighty fabric of general scholarship, for dig as he may in his own narrow quarry he will never catch a glimpse of the ground-plan and elevation so long as he remains there. One-sided views are of little use to the philologist of our day, and if he who forsakes the specialties of Greek for the generalities of comparative grammar has made a false step, neither is he to be commended, who, from prejudice or want of resolution, obstinately refuses to read more than one page of the great book of language which lies open before him.

With regard to the other question, namely, as to the benefits which would result to the general study of comparative grammar from a combination of it with accurate Greek scholarship, very little need be said. The majority of those who have hitherto written on comparative philology have regarded the subject from the side of the oriental languages or of the German dialects, and, occupied by the extent and novelty of their subject, have not paid sufficient attention to the old classical languages of Europe. In fact, no one of the great comparative philologists who have done so much for the science is a professed classical scholar, and, as might have been expected, they occasionally fall into errors with regard to the structure of the Greek language in particular, which are sufficiently obvious to the scholar who has been able to study that language with the advantages which may be derived from an acquaintance with the results of their laborious researches. The science of comparative philology advances so rapidly that every succeeding writer, if competent to add any thing to the stock of knowledge, is also able to correct many mistakes and supply many deficiencies of his predecessors: but he must be careful not to make this the ground of any assumption of superiority, for it would well become every one who follows in the steps of Grimm and Bopp to recollect that he must himself have fallen into much graver errors had not these men gone before him: the *κελευθοποιοὶ παῖδες Ἡφαίστου, χθόνα ἀνήμερον τιθέντες ἡμερωμένην*, should be held in honour even by the constructors of rail-roads.

It may be concluded, then, on the whole, that the time is at length come when the Greek language must be subjected to

the same scrutiny absolute and comparative to which the great body of German dialects has been submitted by Grimm, and the Sanscrit, Zend, and Slavonic in addition to these by Bopp. This examination however should be lexicographical as well as grammatical. Buttmann was well aware of this, when he added his *LEXILOGUS* to his admirable grammar. And here let us express our regret that a man so wonderfully gifted, combining as he did all the learning of the old school with sound views and unexampled ingenuity, was placed in an age preceding though by a few years only the full establishment of comparative philology. It must be obvious to any reader of Buttmann's works, that, had he possessed a sufficient knowledge of the other languages of the Indo-Germanic family, especially had he been acquainted with the Asiatic branch, the work which we consider as incumbent upon the scholars of our age would not be still unperformed. As it is he was in spirit a comparative philologist, and succeeding scholars must make his works, the Grammar and the Lexilogus, at once the model and the groundwork of their labours.

The object of this work, so far as it is confined to the advancement of our knowledge of Greek, is to give to the Grammar and Lexicography of that language all the aid that may be derived from the present state as well of Greek scholarship as of comparative philology; and for this purpose to combine in one body a series of contributions to the better classification of the facts of Greek grammar, and also to the explanation of those words which appear most frequently and prominently in the best writers and the meaning of which is still doubtful or but half understood.

We proceed to set forth its object so far as it has reference to the general philosophy of language.

CHAPTER III.

THE PHILOSOPHY OF LANGUAGE.

THOSE who have hitherto written on the philosophy of language have generally fallen into one of two errors;—they have either omitted altogether the consideration of that department which relates to the formation of sentences, or, what is worse, they have failed to discriminate the two divisions of the subject, and basing their etymological analysis on logical principles have necessarily taken a perverted view of the nature and object of their inquiries. In the following sketch we have endeavoured to remedy this defect, by showing that the resolution of a sentence into its elements is a totally different process from the analysis of those elements themselves—that in a scientific investigation of the general speech of man our principal concern is with the word, its structure and developement; that the same causes which create syntax or logical sentences tend to corrupt and destroy the original forms of speech, so that the attempt to derive the elements of the word from the elements of the sentence is absurd as seeking the whole in its part, and must lead to conclusions utterly false and contradictory.

A formal discussion of this subject attempts the solution of two problems;—it purposes to ascertain, first, the origin of language; and secondly, the connexion of our words with our thoughts. But, although this may be adopted as a methodical division and for form's sake, the two questions, according to our view of the former of them, are in fact one and the same; for, if language is, as we have no doubt it is, a necessary result of the constitution of man as a rational being, if the gifts of reason and speech are necessarily coordinate, then there can be no question, but simply an explanatory statement, with regard to the connexion between language and mind.

The primitive state of mankind has been a favourite subject of inquiry both in this country and on the continent, and some theory of the origin of language generally forms a part of such

disquisitions. Till the introduction of the comparative study of languages these theorists wanted their facts, and therefore met with the fate of those who advance unsupported hypotheses—they did not arrive at any convincing results. The researches of the present century, however, have given an entirely new turn to this subject; the right method has been adopted, and it is this, that the only safe conclusions, with regard to the primitive condition of language, are to be derived from a rigorous scrutiny of all the various forms which it exhibits in its existing state, and though we have not examined all the dialects of the world in a complete and scientific manner, we have got so far as to be able to divide them all into a few great families, and have moreover examined the different members of the class to which our own belongs, with a minute accuracy which leaves little to be desired: the facts with regard to this class have not only been carefully collected but also scientifically classified, so that the utmost reliance may be placed upon any conclusions logically deduced from them: and from a comparison of this family (considered in its unity, which is thus established), with the other great classes of the general language of mankind, a comparison guided and illustrated by sound psychological views, the most profound and highly gifted of those philosophers who have devoted themselves to this study have inferred, that language is the necessary and spontaneous result of man's constitution, that human speech and human nature are inseparable, and consequently that language was originally one¹: physiology has made some

1. William von Humboldt, the most eminent of those who have made the philosophy of the word their study, has stated his opinion to this effect in the most explicit terms. The reader will not perhaps be displeased if we subjoin a few extracts from his great posthumous work, *über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts* (on the varieties in the structure of human languages, and their influence upon the intellectual developement of the human race). "The true solution of the contrast of stability and fluctuation, which we find in language, lies in *the unity of human nature*. Whatever is derived from that which is properly one with me, in this the conceptions of subject and object, of

dependance and independance are interchanged.—What is strange to me in language is so for my (for the time being) individual, not for my originally true, nature" (p. 63).—"The reciprocal working of the individual upon language becomes clearer when we remember that the *individuality* of a language, according to the ordinary acceptation, is such only by comparison, whereas, the real individuality lies in the *speaker* for the time being. Speech acquires its last definiteness only from the individual. No one assigns precisely the same meaning to a word that another does, and a shade of meaning, be it ever so slight, ripples on, like a circle in the water, through the entirety of language.—The power of speech may be regarded as a physiological effect; that pro-

important approximations to a similar result with respect to the bodily structure of mankind²; and thus external probability leads us to the conclusion, that the varieties which we distinguish as well in the form as in the language of man must have been produced by some violent dispersion of the human race over the whole surface of the earth, and by the subsequent operation of the multifarious causes to which the different parts of the separated family would be exposed. The result of investigations of this nature is generally more satisfactory to our inquisitive spirit than any written testimony, however authenticated, with regard to the creation and early state of man: for the facts to which such a testimony relates occurred long before the invention of writing, they are traditions handed down by word of mouth from father to son, beginning with the first man and so going on to the man who wrote them down, and of which even the earliest narrator could have known little without direct and immediate inspiration. Yet all nations have traditions,

ceeding from the individual as a purely dynamical one. The *regularity* of speech and its forms consists in the influence exerted upon the individual; but there is a principle of *freedom* in that reciprocal working which proceeds from him; for something may rise up in a man, the ground of which no understanding in preceding circumstances could discover" (p. 64, 5). "Language is the outward appearance of the intellect of nations: their language is their intellect and their intellect their language: we cannot sufficiently identify the two" (p. 37). "We must regard speech not so much as a dead *begotten*, but rather as a *begetting*, we must abstract from what it is as a designation of objects, and a help to the understanding; on the contrary, we go back more carefully to a consideration of its origin, so nearly connected with the subjective mental activity and to its reciprocal influence thereupon" (p. 39). "Understanding and speaking are only different effects of the same power of speech" (p. 59). "Speech, considered in its real nature is something constantly passing away. Even its preservation by means of writing keeps it only in an incomplete, mummy-like fashion, in which it can get vitality only by lively recitation. In itself it is not an *ἔργον* but an *ἐνέργεια*. Accord-

ingly its true definition can be genetic only. It is, in fact, the ever recurring labour of the mind to make *articulate sound* applicable to the expression of *thought*" (p. 41). The same author in a paper in the Berlin Transactions for 1820—1 (p. 247) expresses himself as follows. "According to my fullest conviction speech must be regarded as immediately inherent in man; for it is altogether inexplicable as the work of his understanding in its simple consciousness. We are none the better for allowing thousands and thousands of years for its invention. There could be no invention of language unless its type already existed in the human understanding. In order that man should understand a single word truly, not as a mere perceivable utterance, but as articulate sound denoting a conception, he must have already in his head the whole connexion of speech. There is nothing individual in speech; every one of its elements announces itself as part of a whole. Natural as the belief in a gradual formation of speech may appear, the invention of it could only happen at once. Man is man only by means of speech; but in order to invent speech he must be already man."

2. See Dr. Prichard's "Researches into the Physical History of Mankind," and Dr. Wiseman's Third and Fourth Lectures.

in a great measure consistent, which describe minutely and definitely their primitive state: and when we find that the oldest of these traditions agrees exactly and entirely with the result of our anthropological studies so far as we have been able to prosecute them with safety, the most obstinate sceptic cannot refuse the homage of veneration to a narrative, of which, if true, there could be but one origin. It matters little to us that the divine truths of the Book of Genesis are sometimes couched in figurative language, that the history of our first parents is veiled under the common oriental symbols, or even that some harmless interpolations may have been introduced into the text by Hilkiah and his son Jeremiah, when, with the fear of a Chaldean invasion before their eyes, they sought to rouse the drooping patriotism of their countrymen by a republication of the sacred books which told of God's great deeds in behalf of their ancestors and of his greater promises to their descendants; it is clear that the essential parts of this document remained unaltered, and we have enough of internal evidence and extrinsic confirmation of the fact, that this book contains the sum of those ancient and venerable traditions which descended by an unbroken chain from that first and highly favoured man who heard the voice of Jehovah Elohim as he walked in the garden at even-tide¹.

It is not our design in this place to enter upon a detailed exposition of the coincidences of science and revelation; we think we may fairly assume as the basis of our view with regard to the origin of language the account given in the Book of Genesis, so far as that account is confirmed by the researches of modern authors. The results of our philosophy are as follows. We find in the internal mechanism of language the exact counterpart of the mental phenomena which writers on psychology have so carefully collected and classified. We find that the structure of human speech is the perfect reflex or image of what we know of the organization of the mind: the same description, the same arrangement of particulars, the same nomenclature would apply to both, and we might turn a treatise on the philosophy of mind into one on the philosophy of language by merely supposing that every thing said in the former of the thoughts as subjective is said again in the latter of the words

1. Genesis, iii. 8.

as objective. And from this we should infer that if the mind of man is essentially and ultimately the same, in other words, if man, wherever he lives, under whatever climate and with whatever degree of civilization, is still the same animal, the only reasoning and discoursing animal, then language is essentially the same and only accidentally different, and there must have been some common point from which all the different languages diverged, some handle to the fan which is spread out over all the world, some first and primeval speech; and that this speech was not gradually invented, but necessarily sprung, all armed like Minerva, from the head of the first thinking man, as a necessary result and product of his intellectual conformation. Now this agrees with the account in Scripture.

“And out of the ground,” says the sacred writer, “the Lord God formed every beast of the field and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field; but for Adam there was not found an help meet for him (*Genesis*, ch. ii. vv. 19, 20).” These words imply that the power of speaking merely and not language was given to man, and therefore there are no grounds for the inference which a modern writer would draw from the passage, that the language of Adam was an immediate revelation from the divinity¹. Adam was so constituted that he had the power of speech and this power he exercised first of all in giving names to the different species of animals, but, says the historian, although he had this power of speech he had no one to converse with, no one to share his sympathies, no one gifted like himself with the wonderful powers of reason and speech, no help meet for him, among all the numbers of animated creation which thus passed in review be-

1. Quand on lit dans la Genèse, que toutes les créatures passèrent en face de Dieu devant Adam, qui leur imposa des noms, espèce de baptême de l'esprit, qu'il leur conféra on conçoit pourquoi dans le système des philosophes de l'Orient, qui est aussi celui de Pythagore et de Platon, l'homme est envisagé dans son origine comme un second créateur, comme un verbe incarné évoquant au moyen du discours les

mystères de la création: espèce de Mage en rapport avec le monde idéal et le monde terrestre, avec la nature et Dieu. C'est le langage primitif des hommes qui est l'arbre de la science; c'est la, comme le disent les livres Indiens, le Veda Céleste; et quelque corruption que les infirmités de notre nature y aient introduite par dans son essence, c'est une révélation de la Divinité même” (Le Catholique, Tom. I. p. 418).

fore him, and so God created him a wife. This short passage actually contains the outline of all that philosophy and philology have taught us of the probable origin of language. The ultimate results of human consciousness are that the thinking subject *is*, and that there *is* something without him; that there is, in the language of the German philosophers, a *me* and a *not-me*, or, if you will, he *knows* that he himself exists, and *believes* that there is something which is not himself. In those two results of all consciousness, in the consciousness of self and of not-self, is comprehended all the world as it exists for the individual. In the former are included all the thoughts, feelings, impressions and ideas which a contact with the outward world and the consequent sensations produce upon the thinking subject. But the human mind is naturally impatient of pure thought: it strives ever after objectivity, and endeavours to complete and fix its inward conceptions by some species or other of outward manifestation; the thought completes itself in the expression. Even if a man were placed alone in the world with all the faculties which he now enjoys, he would give names to the different objects of animal creation as they passed in review before him, he would seize upon some one prominent attribute in each class and mark it by a name of distinction¹. This name he would no doubt express by that which is the only natural and obvious method, namely, by articulate sound. But if such an effort of language might be expected from a solitary man, it would be the inevitable consequence of his meeting with some other thinking and speaking being; he would then necessarily seek to transfer his thoughts to that outward objective world which was cognizable to his fellow as well as to himself by the most natural and obvious method, which is, as we have said, by articulate sound; and if there were at first but two such persons in the world, their communications, regulated by a convention based upon a community of reason and necessitated by a community of wants, would constitute the first language, and, by transmission, the language of all mankind.

The same striving after outward expression, which necessarily produced spoken language, as its primary effect, led in the

1. "Without looking to the communication between man and man, speech is the necessary condition of the thought of the

individual in secluded loneliness" Humboldt, *über die Verschied. d. menschl. Sprb.* p. 53.

course of time to the invention of letters or writing as a more durable manifestation of the thoughts, which was, however, strictly artificial, and must therefore be carefully distinguished from the natural language which necessarily preceded it. The first writing was not alphabetical; each symbol was an independent and significant term, and the huge masses of stone which they set up for monuments, the walls and temples which they built, and the rude figures which they carved and painted upon them, were each and all of them distinct words. The pyramids, arches, and obelisks on which the traveller still gazes with wonder, the ruins of Egypt, Babylon, and Palmyra, are not merely, as a quaint writer¹ has called them, the irregularities of vainglory, the wild enormities of ancient magnanimity;—they are the huge chronicles by which the men who built them tell to posterity the wonderful history of their industry and their art,—the writing of a race of giants, traced with enduring characters on the great page of nature, which neither the rage of the elements, nor the passions of men, nor even the slow sure hands of time have been able as yet to convert into a palimpsest. The primary impulse to these rude writings was a hankering after durability, a desire to leave a lasting memorial of their history, which should at the same time serve as a rallying point to their descendants. According to the sacred writings, they wished to build themselves a city and a tower and to make themselves a name, lest they should be scattered abroad upon the face of the whole earth: as a punishment of this attempt the dispersion and consequent varieties of human language took place (*Genesis* XI. 4 foll.). It does not in any way appear from the words of the sacred narrative that the common language of man was violently and suddenly broken up into a number of different speeches or dialects. The words of scripture are (v. 7, 8) “let us go down and there confound their language that they may not understand one another’s speech. So the Lord scattered them abroad from thence upon the face of all the earth; and they left off to build the city.” The plain construction is, that as their offence was an attempt at premature centralization, their punishment would be the dispersion which they sought to avoid, and this dispersion might be, and probable was, a cause of the difference of tongues, but could hardly

1. Sir T. Brown, *Hydriotaphia*, ad fin.

have been an effect of it; for if any two sets of men had a common object in view, they would not be long in finding a medium of communication. It is in accordance with the simplest view of the whole Bible scheme to suppose that dispersion as well as death was the consequence of the fall, just as reunion and life are to be the consequences of redemption. When the first man had eaten of the tree of knowledge, he not only lost his immortality, but also the place of his abode, and was cast out upon the wide world, lest, it is stated, he should put forth his hand and take also of the tree of life, and eat, and live for ever (*Gen.* III. 22); that is, lest he should obviate one of the consequences of his fall,—death. Through the bitter ordeal of the deluge his descendants passed with still one language and one form: they attempted, however, to obviate the other consequence of his fall, the dispersion, but they were then still more entirely separated, so much so, perhaps, that large gaps were left between the settlements of the different races, and by the operation of secondary causes the languages of the earth became different. On the supposition that the language of man was originally one, it is necessary, as Niebuhr says, to suppose also a miraculous divulsion, for it is hardly possible that there should be such differences as we find between two families of languages, the Semitic and the Indo-Germanic for instance, if the nations which belong to the different families had gradually and slowly separated: but the miracle would be equally great and effective if it were such as we suppose. Whatever the form of his features or the colour of his skin may be, man is everywhere distinguished from the rest of animated creatures by the godlike faculty of reason; and the scarcely less godlike attribute of speech is enjoyed by all human beings, from the broad-browed European, who speculates upon the high things of heaven, to his woolly-haired brother, who leads a thoughtless life in the plains of Africa. Nevertheless, there are such outward bodily differences between the different races of men, that there have been found some who deny the claim of the inhabitants of Africa to rank with the Europeans as the same animal. Now the physical differences of the races spread over the earth's surface are explicable from secondary causes on the hypothesis of an original pair: and we find differences in intellectual developement corresponding to the physical differences of nations. The secon-

dary causes to which these varieties are attributable are climate and civilization. We find too that the language of a nation may be affected by differences of climate and soil¹, and that it varies directly with the intellectual organization of the people. Indeed language in general always receives its last touches of completeness in the individual; for the same dialect it varies with the education and reflecting powers of the individual, for the same family of languages it varies according to the education and reflecting habits of the particular tribe, in other words, according to the degree of civilization. Hence, if the great mass of men who assembled in the plain of Shinar were so separated, and the different parts so kept asunder, that one could not participate in any extraordinary advances in civilization made by the others, and each placed under the influence of a different climate, we can imagine that differences of form and language, as great as those which we find in the world, might have been produced by these causes alone. The Christian dispensation is destined to furnish a remedy for both consequences of the fall,—death and dispersion: Christianity is not merely the harbinger of life; it is also the point of reconvergence, of the reunion of the human race. The fragments of the tower-builders were placed as isolated points in the great world, and when, by the spread of population, the borders of each touched upon those of some other once isolated tribe, they could not recognize the forms, nor understand the language, of their brethren, from whom they had been separated for thousands of years. It marks the intentions of the founder of Christianity, that the first gift conferred by him upon his apostles, the ministers who were to begin the work of reuniting mankind, was the gift of tongues, an intuitive knowledge of the different dialects of the world, instead of that acquired by a laborious study of grammar, which man had invented as an antidote to the curse².

One of the earliest and most important results of this striving after outward manifestation, which produced the first rude monument and picture writings, was the introduction everywhere of idolatrous forms of worship. The first great fact of consciousness is, as we have seen, the existence of an external world in contrast to the thinking subject. To this belief the mind arrives on the evidences of the perceptions excited and called into being by contact

1. Müller's *Dorians*, Vol. II. p. 483.

2. *Neque tamen dignitas ejus (Grammatices) parva censenda est; quandoquidem antidoti cujusdam vicibus fungatur*

contra maledictionem illam Confusionis Linguarum. Bacon de *Augmentis Scientiarum*, Lib. VI. (Vol. VIII. p. 307, Montagu.)

with the world of sense. But there is another belief, to which the reason comes almost as soon on the evidence of its own reflexions, the belief in a superior being who created the subject as well as the object of consciousness, the great point of union to the two contrasted realities. It is, however, much easier to contemplate the common objects of consciousness, than to think of and regard unceasingly this reality of the reason. And thus, impatient of abstraction, the reasoning being gives an outward manifestation to this as well as to his other thoughts, he writes God on the world as he wrote other things, with picture and statue imitations, and ere long worships the type instead of the reality; he falls down on his knees before a mere *memoria technica*, he pays homage to an object of sense, forgetful that the essence and definition of God, his own idea of a supreme being, is, that he is something without the subject, which is yet not a part of the external world. Picture writing, and indeed all the arts are but so many different indications of that feeling which gave rise to the worship of images; they are all different species of idolatry, different symptoms of man's aversion to abstract thought, of his love of dresses and disguises, of his naturally unphilosophical mind. For what is philosophy but an undressing of the world¹? It is to deprive our thoughts of all those outward veils and vestments in which they are generally too prone to wrap up the objects of their contemplations, it is to strip eternity of the robe of time, to divest existence of the accident of mortality, to let fall the many-coloured cloaks of individuality, in which the genus is enveloped, to see the soul unclothed and unencumbered with that garment of flesh which weighs it down to earth, and brings it to the near contact of death and decay. All this is difficult to the untutored intellect; as difficult as to gaze on the noon-day sun without a cloud, or a mist, or even so much as a bit of coloured glass, to break the intensity of his light; and yet it is what we ought to do, what we must do if we would live as creatures that enjoy reason and hope for immortality.

The invention of alphabets, or of writing, in the modern sense of the word, was the first step towards the overthrow of idolatry, and it is a remarkable fact, that Europe owes her alphabet to

1. "The beginning of all Wisdom is to look fixedly on Clothes, or even with armed eyesight, till they become trans-

parent" (*Sartor Resartus*, p. 66, see also pp. 74, 210).

the only nation, which, in the remote ages, preserved itself to any considerable extent from the worship of symbols: but still it was only a partial remedy; for books, those sworn foes of all idols, of all worship of the world of sense, were but few, and even "the old man eloquent" preached his mellifluous wisdom to a small audience. It is true that wherever they went they were fraught with a true vitality, they sped like the knights errant of old, releasing many an oppressed mind from captivity, and here and there lighting the lamp of truth in a land of darkness; yet their influence was very limited, and even after the Christian religion had appeared, causes, which are well-known, operating with it, crumbled the old fabric of civilization into minute fragments, and the mind of man was again a worshipper of images and of art. At length came the invention of printing, the most important event, perhaps, in the history of the world. From this time forth, the book was not a solitary hero, a Hercules or a Theseus, striving for the liberation of men from the giants who tyrannized over them. Their name was legion; in infinite hosts they spread themselves over the world, conquering and to conquer. First of all, the idolatry of popery fell before them, then art as the instrument of idolatry was overthrown; philosophy was by them reinstated in her rightful dominion; philology came forth as her hand-maid; feudality and tyranny gave way to their victorious march, and to this day the despots of the world tremble before them. Let us not be deceived: Luther was great, but Guttenberg was still greater¹. The letter did not kill but gave life, for it was by the letter that the spirit lived again, and it is the aid of the letter, it is philology, in one of its forms, which we must have recourse to whenever we would struggle with those idols of the forum², the realized ideals that ever and anon usurp the throne of reason, and tyrannize over the misnamed free-will of man³.

From these reflexions on the influence produced upon literature, and, through it, on the opinions of the world, by a greater facility of writing, and an unbounded circulation of written

1. The reader will find in Victor Hugo's *Notre-Dame de Paris* (Liv. V. Ch. 2.), some remarks on this subject written in a wild and extravagant tone, as is the wont with modern French authors of that school, but yet very striking and true.

2. Bacon, *Novum Organon*, Lib. I. Aph. 59, 60.

3. Carlyle's *Hist. of the French Revolution*, I. p. 13.

documents, we come naturally to consider the effects of the invention of writing on the spoken language of which it is the secondary expression. The art of writing was a mere invention; it stands on precisely the same footing with the other useful arts: hence it was at first rude and uncouth, and as it did not for a long time arrive at perfection, or become so easy as to fall into general use, it has produced, by its want of completeness, great and lasting evils on the mind of uneducated man. But language was a spontaneous result of our organization, and thus, like every production of nature, was as perfect at the beginning, indeed much more so than it is now, when literature or the written word has developed itself in a thousand different ways. If any one thing more than another can show the absurdity of those who speak of an invented language, it is simply this fact, that the oldest languages are always the richest in materials, the most perfect in analogy, the most uniform in etymological structure. Philology too instructs us that those very words which the advocates for an invented language consider the most difficult to invent, and therefore as the last introduced, are, in fact, the basis of all language; for instance, the pronouns and numerals, which Adam Smith¹ considers of recent introduction, are known to have been the very oldest part of every tongue, for it is just these words which retain their identity in languages which have been longest separate, and have therefore become most unlike in other particulars. The effect of increased use upon the structure of inflected language is rather to weaken and corrupt than to improve or amplify, and it may be laid down as a general rule, that as such languages remove themselves from their origin the love of what is called euphony gains ground more and more, the elements or roots are no longer clearly discriminated from the terminations, and the meaning of the separate parts of the word becomes less distinguishable, till at last all inflexion is superseded by a system of prefixes and auxiliaries. The monosyllabic languages, which are the most imperfect of all, appear to be degenerated forms of older and more complete idioms. It may seem strange, but it is nevertheless true, that this corruption of the forms of language has arisen, not in spite of, but directly in consequence of literature, and

1. *Considerations concerning the Formation of Languages* at the end of the

Theory of Moral Sentiments. (vol II. p. 431.)

the invention and diffusion of writing, which have produced such important results in literature and science, and, through them, on the general mind of man, have thus contributed to undermine the mighty and perfect structure of spoken language, the immediate production of that reason of which writing is so important an instrument. This has not been generally remarked¹, and it will be worth our while to bestow a little consideration upon it. The beginning of literature has been prior to the beginning of writing in all those countries in which literature has subsequently attained its greatest developement. As the want of writing materials necessitates the adoption of metre, the first composition in every language is poetry. Had the invention of writing and printing been coeval with the first beginnings of language, we should certainly never have had an epic poem, perhaps never a line of poetry in the world. Besides, there appears to be something in the nature of early man, full as he is of sublime inquiry, and impressed with the wonders of the earth and the sky, which he gazes on with awe and veneration, that leads him on to poetry. The language of the old world streamed freely from the breast, swelling with infinite redundancy of expression, replete with the richest and most significant compounds, and ever bursting forth into song. "We may suppose," says William von Humboldt², "that there was hardly in any desert a wandering hord, which had not its lays, Man, as a species, is a singing animal, connecting, however, thought with his melody." The sage, who discoursed to his disciples on the mysteries of man and the world, set before them "the sweet food of sweetly uttered knowledge³," and the chronicler who wished to perpetuate the past deeds of his warrior race sang to the harp the verses he had composed. Prose can only arise after a long period of civilization, after writing has become tolerably easy, and writing materials sufficiently abundant⁴; it keeps pace with the logical or syntactical developement of a

1. It has been noticed, however, that writing could never produce any change upon the spoken language otherwise than through the literature (See A.A.E. Schleiermacher *de l' Influence de l' Ecriture sur le Language*. Darmstadt. 1835. p. 101).

2. *Ueber die Verschiedenheit d. menschl. Sprb.* p. 59, 60.

3. Sir P. Sidney *Defence of Poesy*. p. 495.

4. *Scripturam tentare et communi usui aptare plane idem videtur fuisse, atque prosam tentare et in ea excolenda se ponere.* Wolf *Prolegomena ad Homerum*. p. 72.

language, so that writing, which can produce no effect in the way of improvement on the forms of a language, exercises a most important influence on the construction and connexion of its sentences, and therefore on the science of the people who use it. The method of language gains at the expense of its materials. It is observable that the first literary productions of a nation, their epic poems and lyrical hymns, are either entirely devoid of syntax or but inadequately provided with it. In the earliest poems of the Indians, for example, the Râmâyana and Mahâ-Bhârata, there is no syntax or construction properly so called, and as we do not know to what extent prose composition in the Sanscrit language was cultivated, we cannot say how far they ever arrived at a logical syntax. In the Greek literature, however, we possess an excellent specimen of a language developed through all the successive stages, from the rude luxuriance of the Epos to the careful but barren elegances of logical prose, for Hellenism, after it had secured its predominance over the Pelasgian or older element, was subjected to no external interference; its changes and progressions took place within itself; and it may therefore be cited as a good example of the influence of literature and civilization on the syntax of a pure and highly cultivated idiom. In this language, before all others, we see the article, that great implement of logic as distinguishing the subject from the predicate, develop itself from the pronoun or general designation of locality, in this language we see the differences of mood developing themselves from differences of tense, and all the syntactical modifications of the subordinate or accessory verb expressed by the participle, an etymological modification of the verb; in a word, the Greek language, like Mahomet's coffin, which hangs between earth and heaven, has taken the middle place, between the synthetic and analytical languages, combining the perfection of the word, with the regularity of the sentence to a degree which no other idiom can parallel. The language of Homer is totally different from that of the later poets, and although his lines are not so devoid of logical structure as the slokas of the Indian poems, (and this is perhaps explicable from the fact that our present text of the Iliad and Odyssee is little more than a *rifacimento* of the original works) it is still obvious on the most hasty perusal that the logical structure of sentences for which prose Greek is so remarkable

had not yet established itself in the language. The same is also evident from the old Attic prose of Thucydides, which is full of what we should call bad grammar, arising of course from his inability to correct and polish his style by writing his sentences over and over again. Thus we often find that he has forgotten at the end of a sentence how he commenced it, or has purposely changed the construction without being able, from want of facility in the mechanical part of writing, to retouch the beginning of the period. When Plato and Demosthenes flourished, the materials and habit of writing must have improved wonderfully, as we may infer from the correctness and polish of their style; it is stated, too, that the former used frequently to rewrite his works, and that a tablet was found after his death in which the words at the beginning of the Republic were transposed in a number of different ways¹; and we are told that Demosthenes copied out the history of Thucydides eight times². Even in the Attic dramatists there is a great difference between the construction of the choruses, written after an old model, and the more prosaic dialogue, and yet this last is by no means so conspicuous for that discrimination of the subject and predicate by which the prose works are distinguished. After a language has once arrived at a full syntactical developement this distinction between prose and verse ceases to exist; the constructions in poetry then possess the same logical exactness as those in prose. But the Attic idiom, though progressively approximating to this state, did not attain to it till the time of Xenophon and Plato, the latter of whom gave the first hints of the proper analysis of the sentence³, which he could not have arrived at had not the Greek language been by that capable of logical prose: for in order that the theory of syntax may be discovered, the language must have become syntactical. As Plato discovered this theory from the logical texture which his own language had assumed, conversely Aristotle, when he had formally and methodically set forth the principles of the Platonic analysis of the sentence, adapted his own style to this method; and thus he is not only the great expounder of the method of language, but also the most methodical of writers; a circum-

1. Quintilian. VIII. 6. § 63. Dionys. Halic. *de Compositione Verborum*. p. 208 Reiske.

2. Lucian. *adv. indoctum* p. 102.

3. See below, Chap. VI.

stance which has induced an eminent author¹ to compare his style to a table of contents. Thus we see that the history of Greek literature exhibits the developement of a language originally the most copious into one confessedly the most syntactical, one in which the discovery of logic or of the principles of syntax was first made. And the wonderful fact about it is, as we have said, that it should have arrived at this ultimate state with a smaller sacrifice of its original form than any other language in the world. In general, however, it may be laid down that languages fall off in perfection of form as they gain in regularity of literary composition, and that the same causes which destroy the symmetry and regularity of the structure of words, as a product and counterpart of the mind promote the efficacy of language as an instrument of science. Examine the analytical languages of modern Europe—our own for instance; you will find that in the arrangement of their words in sentences they are absolutely confined to the logical method. And what is the state of their etymological structure? In the English language we have no distinction of genders by means of inflexion, no declension, no facility of forming compound words, and but a few fragments of the Anglo-Saxon conjugation. In fact, the most perfect language for the purposes of deduction would be one, the words of which have no individual signification, but are merely general symbols; for the method of language, as we have before observed, is independent of any particular language; but as such a language can exist in writing only, it follows that writing must have an important influence on science. And this we know to be the case: for it is clear that the greatest advances in science have always been preceded by some great improvement in written language whether it be the step from picture-writing to the alphabet, from the rude manuscript to the printed book, or from the abacus to algebra.

We have now given a general sketch of the first part of the philosophy of language; we have sought to point out the original unity of speech, to show that spoken language is natural, but written language artificial, and to draw a bold and intelligible outline of the effects of the latter upon the literary developement of a nation. It remains that we turn to the second

1. The poet Gray.

part of the subject, and state, by way of explanation, the connexion between the results of psychology, or the science of mind, and of the philosophical analysis of inflected language. That such a connexion, or rather identity of results, should exist is necessary, if we are right in maintaining that language springs naturally and spontaneously from the mind of man.

The results of all that writers on the philosophy of mind have collected, with regard to our thoughts and the constitution of our intellectual powers, may easily be summed up, so far as they accord with our own convictions. Every man has one primary belief; that he exists, and that there is something without him, full of realities animate and inanimate; he sees too an infinity of beings like himself, who live in the same belief. This something without him is known to him from his sensations, which, acting in the first instance on his bodily organs, produce an impression on his mind which we call a perception. These perceptions survive the presence and the influence of the substance which caused them, they become a part of the mind, and are called conceptions. Now the mind of man is so constituted that, whenever a perception is recollected or a conception arises in it, it instantly awakes some other similar conception, or perhaps a whole train of them, connected by the relations of resemblance or contrast. This habit or tendency is called association or suggestion. We can also combine those conceptions at pleasure, so as to form new conceptions existing only in the mind, and this faculty is called imagination. Now all these powers with the exception of the last are confessedly enjoyed by the lower animals, and we class them all under the name Understanding, the faculty of rules, or the faculty of judging according to sense¹. But there is also a higher faculty, which we alone possess, which presides over and regulates the understanding, and which we call Reason, or the faculty of principles. By this faculty we compare our conceptions with one another, we estimate their similarity or incongruity, we ar-

1. It will be observed that we use the term "understanding" in a more limited sense than others, Coleridge for instance, give to the "*human* understanding." Coleridge attributes to the understanding many operations which we consider as peculiar to the reason—discourse, abstraction, generali-

zation, &c. (*Aids to Reflection*, p. 215). We adopt the Kantian distinction, in general, but we are rather disposed to comprehend under the term reason every faculty which is peculiar to the mind of man, excepting the imagination, which, however, can exist only in a reasoning and speaking creature.

range the objects of our perception in classes, and these classes again under more general subdivisions, we compare these ultimate generalizations with one another, and so arrive analytically at absolute truth: or, in some cases, we seize upon the principles of science synthetically, a priori, and at once. It is this faculty which constitutes our humanity, it is to this that speech ministers as an indispensable, but subordinate, adjunct.

The knowledge of his own existence and the simultaneous belief in an external world,—this is the first act of man's consciousness. But this consciousness is itself subjected to two other primary intuitions: it is subordinated to the intuition of space, for he is *here*, and every thing else is *there*, and these are two positions; it is subordinated to the idea of time, for the very belief in his own existence presumes a continuance.

This then is the sum of psychology. Man is, and the world is, there is a *here* and a *there*, a *me* and a *not-me*,—the knowledge of this fact is consciousness. He has perception, conception, association, which constitute his Understanding. He compares, generalizes, knows, and discourses; these are the operations of his Reason. And all his thoughts are modified by and subordinated to his primary intuitions of space and time.

Now if language be, as we say it is, the genuine product of the reason, we should expect to find traces of all these conformations of the mind in the structure of our speech. And so it is.

Our analysis of the Greek and cognate languages has taught us that there are two primary elements of speech; the first, an organizing element which enters into all words, and which we call a pronoun; the second, a material element which constitutes the basis of all significant terms which are not pronouns. The pronoun expresses in the first instance the relation of the thinking being to the external world, of the subject to the object, of the *me* to the *not-me*, and this is formally put as an opposition of *here* to *there*. The first general and vague idea of *there* is soon split up into a number of modifications, of which the first is a distinction of objects in the *there* or outward world, according as they are nearer to or farther from the subject, and subsequently a designation of all the different directions in which they stand with regard to the subject. The pronoun therefore in its different forms is an expression of the first great fact

of consciousness, that we are and that there is something without us.

The material element of language includes the names of all the objects, which present themselves to us in the outward world, and to our contact with which we owe the experiences that are the staple for our understanding. We find on examination that all names of things are generic terms, that they describe some particular quality or attribute of the object, which strikes us as most remarkable in it, and by which we at once see its resemblance to the other objects of the same class. We observe, too, that even the words which we call proper names were originally generic terms, designating some qualities, and consecrated to certain particular objects possessing those qualities in a remarkable degree. It is, therefore, clear that the very act of naming implies classification and abstraction, or reasoning power, and when Adam is said to have named all the animals, this is only another way of expressing the fact, that by his reasoning power, which is identical with the power of speech, he divided them according to the *prima facie* classes of natural history. Of course, this use of general instead of special names has a great effect on the conciseness and perfection of language as an instrument of thought. But the process does not stop here; not only are individuals described by general names, but all the relations which bear any resemblance to the attribute from which the body of the name, or the root as it is called, is derived, are expressed by words into which that root enters; nay more, very many words expressing contrasted relations have the same root perhaps slightly modified. This is an exemplification in language of the principle of association or suggestion, which all psychologists recognize as one of the most important operations of the mind. All writers on suggestion or the association of ideas admit, either directly or by implication, that contrast or contrariety is a species of connexion among ideas; indeed, Brown makes it one of the *primary* laws of suggestion. Now, if we recollect that suggestion or association depends upon previous coexistence or previous proximate succession, we shall not wonder, that, in this natural and necessary process of expressing the greatest number of thoughts or modifications of thought with the fewest possible words or modifications of words ideas of contrast, as well as ideas of resemblance,

should be expressed by words, into which the same, or a slightly modified root enters; for all contrasts and resemblances are relations, and no idea of a relation could be formed unless we had seen the related objects together, or experienced the related feelings in close succession; but in this case, where the perceptions have taken place together, the recollection of one perception awakens a remembrance of the other; consequently, if we have got a word to express one of these related ideas, that word suggests the other idea to our mind; therefore, the root of that word, or a slight modification of it, would naturally be adopted to express the other idea, whether it be an idea of contrast or an idea of resemblance. And thus we find that a word may bear two contrasted significations, or there may be two or more words, containing the same or slightly modified roots, which denote contrasted or contrary objects or feelings, when the objects or feelings have been seen, felt, or experienced, always or generally, in connexion or in immediate succession¹.

Every word containing a root, or belonging to the material element of language, also contains by way of prefix, suffix, or both, a pronominal element. This is the counterpart in language to the psychological fact, that every act of consciousness is subordinated to the two conditions of thought, the intuitions of space and time. The old Epicureans maintained that the only real existences in the world were matter and space², and that

1. The following are a few instances of the principle of association as it manifests itself in the same or a cognate language.

Contrast.		Cause and Effect.	
<i>havere</i> , wish, <i>habere</i> , have.		<i>αἶω</i> , speak, <i>αἰτῶ</i> , hear.	
<i>cupio</i> , desire, <i>capio</i> , take.		<i>αὐδάω</i> , speak, <i>audio</i> , hear.	
<i>λάω</i> , wish, <i>λάω</i> , take.		<i>καλέω</i> , call, <i>κλύω</i> , hear.	
<i>χρήσιμος</i> , <i>χρησμεῖν</i> , assist, <i>χῆρος</i> , <i>χρητίζειν</i> , want assistance.		<i>video</i> , see, <i>οἶδα</i> , know.	
<i>carus</i> , possessed and valued, <i>carere</i> , want.		“set” (place), “sit” (be placed).	
“dear,” (prized) because you have it, “dear,” (expensive) because you want it.		<i>δέω</i> , bind, <i>δαίω</i> , burn.	
<i>χρεία</i> , use, <i>χρεία</i> , need.		<i>ἄπτω</i> , fasten, <i>ἄπτω</i> , set on fire.	
<i>gestire</i> , wish, <i>gerere</i> , carry with one.		<i>δημος</i> , <i>δημός</i> (below, p. 396).	
<i>trachten</i> , look at eagerly, <i>tragen</i> , to carry.			
<i>μένος</i> } a moving force, <i>μέμονα</i> } desire,	<i>μνήμη</i> } remain- <i>μένω</i> } ing. <i>μέμονα</i> }	<i>δέκ-σιος</i> , <i>χείρ</i> , <i>hand</i> , <i>finger</i> ,	<i>δέκ-ομαι</i> , <i>αἰρ-έω</i> , <i>hin-than</i> , <i>fangen</i> ,
<i>θέω</i> } quickness of motion. <i>θοός</i> }	<i>τίθημι</i> } rest. <i>θάκος</i> }	the in-strument. the conse-quent act.	
“fast” (rapid), “fast” (fixed).			

2. Lucretius I. 446.

præter inane et corpora, tertia per se
Nulla potest rerum in numero natura relinqui.

every thing else was either a property (*conjunctum*) or an accident (*eventum*) of these¹. Time, for instance, was an accident of matter, not perceptible in itself, but to be inferred from the rest or motion of things². With what connexion with this materialistic view we know not, but all people, whether philosophers or not, seemed to have made up their minds, till Kant appeared, that space at all events was something external, empirical, and real. Kant, however, based his critical philosophy on the position that space and time are *a priori* intuitions, because we cannot form a conception of outward objects without a presupposition of space and time; they necessarily form the basis of all outward phenomena; they are both of them taken together, pure forms of all perception, and consequently make synthetical positions *a priori* possible³. It is true that the intuitions of Space or Position, and of Time or Continuity, are equally original and equally necessary, but if we analyze them more rigorously we shall find that the intuition of Time is only a refinement and modification of that of Space. These two primary notions may be otherwise stated as an intuition on the one hand of position or fixedness of objects with isolations or intervals, which is the intuition of Space, and an intuition on the other hand of continuousness or motion of objects, or of such a closeness and proximity in their positions that the intervals are not perceived or not taken into account, and this is the intuition of Time. Now it is clear even from common language, that this is the whole distinction between space and time, for the words which we use as indications of position, such as “before” and “after,” “backwards” and “forwards,” are also indicative of time. We shall, however, make our meaning clearer by an example.

That these primary forms of thought necessary to perception are the basis of pure mathematics, is distinctly stated by Kant⁴, and it is indeed obvious to every one, who agrees with Plato in considering the exact sciences as derived from perception by the intellectual faculties. The two first invented of the exact sciences were Arithmetic and Geometry, which are both referable to the intuition of Space. The latter was always, in the hands

1. v. 450.

Nam quæquomque cluent aut his conjuncta duabus
Rebus ea invenies aut horum eventa videbis

2. v. 463.

Nec per se quemquam tempus sentire fatendum est
Semotum ab rerum motu placidaque quiete.3. *Kritik der reinen Vernunft*, p. 28-43.4. *Kritik der reinen Vernunft*, p. 41.

of the old geometers, the science of position; in the former, all the principles are derived from the notion of intervals, and the primary names of the numbers are, as we shall hereafter see, pronominal words signifying position. For convenience in reckoning, it soon became customary to substitute for these arithmetical words a set of symbols, all of them single letters, and people were not long in inventing concise methods of combining these according to the principles of the science. But even these abbreviations were not enough, and a sort of short-hand was invented in different parts of the world, which got the name of Algebra. This written language, for it was only a set of symbols, and therefore could not be spoken, was, in process of time, extended to the expression of geometrical results, but only imperfectly, and why? because the geometer sometimes encroached upon the domain of the other intuition, and a science of pure time had not been developed from the sciences of Space. In fact, the intuition of Time or continuity was much more difficult to deal with; like the old Heracleitean doctrines it presupposed a continual flowing or change, and escaped from the grasp of expression. The great difficulty to be surmounted was a philological one, the construction of a language to express motion, time, or continuous change. This obstacle was surmounted at nearly the same period by both Leibnitz and Newton, and their discovery of the language of change was one of the greatest importance immediately for physical science, and ultimately we have no doubt for philosophy in general. No one has been at the pains to point out by what steps they arrived at it: it will, we apprehend, be easy to do so. The most obvious example of continued change, or melting down of intervals, is that of physical continuous motion: so obvious, indeed, that the ancient philosophers included under the name *motion* (κίνησις) all that we include under the term *change*; thus, Plato *Theætet.* p. 181 D. δύο δὲ λέγω τούτῳ εἶδη κινήσεως, ἀλλοίωσιν, τὴν δὲ περιφορὰν (read φορὰν.) *Parmen.* p. 138 C. κινούμενον ἢ φέροιτο ἢ ἀλλοιοῖτο ἄν. *Aristot. Phys.* VII. 2. ἐπεὶ δὲ τρεῖς εἰσι κινήσεις ἢ τε κατὰ τόπον, καὶ κατὰ τὸ ποῖον, καὶ κατὰ τὸ ποσόν, ἀνάγκη καὶ τὰ κινούμενα τρία. ἢ μὲν οὖν κατὰ τόπον φορὰ, ἢ δὲ κατὰ τὸ ποῖον ἀλλοίωσις, ἢ δὲ κατὰ τὸ ποσόν αὐξήσις καὶ φθίσις. In accordance with this, then, the first language or science of change borrowed all its terms and even its name from physical motion:

though from the very first it was applied to the investigation of problems in change or continuity in general. The natural division, therefore, of the exact sciences is this. (1) The science of positions or intervals, which includes geometry and arithmetic. (2) The science of time or of continuous change, which comprehends mechanics, dynamics, and the great problem of physical astronomy. When algebra, or the symbolical language in which the sciences of space were expressed, was applied to the science of time, it was called Fluxions or Differential Calculus; but it might in fact be called by the name of the older language, of which it is merely an extension. We are aware that a most eminent mathematician, in the sister island, has asserted that Algebra, by which he means all that is included in the unphilosophical use of the word analysis, is the science of pure Time¹, and he even goes so far as to say, that arithmetic is a part of the same science²: but with deference to him and another distinguished analyst³, who defines Algebra as the science of general reasoning by symbolical language, we must insist that Algebra can never be called a science, when separated from its applications, which are all so many distinct sciences. If the science of pure time is coextensive and identical with Algebra, as the former scholar asserts, then must Geometry, which is the science of pure space, become the science of pure Time whenever it is expressed in analysis. Algebra should be defined as the method or art of combining symbols, as a language in which we can carry on the most abstract and general reasonings about sensible objects, considered in their relation to one or other of our original intuitions.

It appears, then, from the progress and extension of Algebra, that the intuition of Time, though necessarily co-ordinate with that

1. Sir W. Rowan Hamilton, in the introductory remarks to an essay "On Conjugate Functions and on Algebra as the Science of Pure Time" (*Transactions of the Royal Irish Academy*, Vol. XVII. p. 293 foll.), states "that his object is to inquire whether existing Algebra offers no rudiment which may encourage a hope of developing a science of Algebra, properly so called, strict, pure and independent, deduced by valid reasons from its own intuitive principles; and this not less an object of *a priori* contemplation than Geometry, not less distinct in its own essence

from the rules which it may teach or use, and from the signs by which it may express its meaning; and that he has been led to the belief that the intuition of *time* is such an element." This is not the place to enter upon a formal examination of so profound a subject: but we are sure that any one who will look into Sir W. R. Hamilton's paper, and compare it with the explanation given in the text, must admit that he has confused the method of Algebra with one of its applications.

2. *Ubi supra*, p. 308.

3. Professor Peacock's *Algebra*, § 1.

of Space, may be derived from it by adding the idea of motion or change, or by melting down the intervals which constitute position, and that in scientific language, at all events, the expression of Time is posterior to that of Space. In the common languages we find two classes of the material words, which we call nouns and verbs. The former are capable of expressing relations of place only: the latter denote actions or express relations of Time. Yet we find that both are made out of the same materials; the roots or stuff of language enter into each set, and they are each of them combined with pronominal elements, which denote the case-relations in the former, and the person-relations in the latter; the cases of the nouns expressing the position of some object with regard to other objects, the persons of the verb the point from which the action begins, or at which it ends. These we shall see stand upon exactly the same footing, and the expression of agency, whether effected by a case, a preposition, or a person ending, is still strictly pronominal or derived from the intuition of space.

From this examination we see that the principles according to which the words of a perfect, or, what is the same thing, an inflected language, are formed, that is to say, their anatomical structure, or internal mechanism, is the counterpart of what we know of the operations of the mind. Here, however, the parallel is at an end, and we must be careful to recollect that the words themselves, when once formed into a whole, are nowise representatives of any thing in the mind. They may go on through all possible *nuances* of meaning, and even be used by abstraction without any regard either to their structure or primitive signification, without in the least affecting the mind with a comprehension of their import: nay, it is, as we have shown, the natural process in language, as it develops itself syntactically, to destroy the fullness and significance of its individual words; and highly beneficial to science that such should be the case. A very pregnant example of this is furnished by those general abstract terms of which so much has been said by metaphysicians.

If we examine the abstract and general names in any language, we shall find that they are only tropical or figurative words properly referring to sensible objects; and the reason of this is obvious, for the whole end of language is to transfer our inward feelings to the outward world, so that they may be cogni-

zable to others, and objective to ourselves; now in order to attach a name to a thing, it is necessary that the name and the thing should be presented to the observation a certain number of times together: but it is easier to present a material object to the observation of another for the purpose of naming it, than to describe to him an impression or a thought, consequently material objects are first named, and the thoughts or ideas described by a metaphorical reference to them. Of course, this method of forming our abstract terms, though necessary under the circumstances, is productive of serious inconveniences; by using metaphorical words, we are apt to reason vaguely in consequence of the different significations which the words bear in common language. Hence for the purposes of science it would doubtless be desirable to have a set of words which bear no specific meaning. But this is impossible in spoken language, except in the case of mere pronominal words, denoting not things but the positions of things: therefore it is only in Arithmetic and Geometry that we can have a spoken language perfectly general. In symbolical written language, however, it is possible to put down marks or signs, and invent laws for their combination without at all troubling ourselves with their interpretation, and it is to the invention of such a language, and its subsequent extension to subjects beyond the arithmetical calculations to which it was at first applied, that the great advances in pure mathematics, and the sciences depending on them, are to be attributed.

As abstract general terms are merely the names of sensible objects used tropically, they could not be considered as the representatives of any ideas in the mind, even though it were true that the words of a language, and not the mode of forming them only, might be regarded as the representatives of mental operations. The controversy between the realists and nominalists, of which we have given a short account in the last Chapter, could not arise at the present day; every one is now aware that words, as the signs of generalization, are the only objects about which general reasoning is conversant. If any question of this sort could be agitated at present, it must be one between the nominalism of Occham, or conceptualism as some might be pleased to call it, and the ultra-nominalism of the school of Hobbes, Horne Tooke, or Bentham. Some of these have gone so far as to seek for general truths in the words of a particular lan-

guage, but no one, nowadays, would conversely assert the objective existence of general ideas, as something independent of the general terms which we use in reasoning.

It is true, indeed, that general terms presume generalization ; it is true that there is such a thing as general, necessary, absolute truth, and that synthetic judgments *a priori* are possible ; it is true that there are genera and species of things, and, in general, representative or abstract knowledge as opposed to perceptive or intuitive knowledge ; but it is not true that, because we can abstract and generalize, therefore we have in our mind general abstract ideas or images of the absolute and unconditioned, still less that our general terms are representatives of such ideas, and least of all that such abstract ideas have an independent existence. As a great philosopher has remarked, in speaking of the metaphorical meaning of general terms, our necessities have obliged us to depart from the natural order of our ideas ; we have been obliged to attach ourselves to one furnished by the occasions and accidents to which we are liable, and this order gives us not the origin of our notions but the history of our discoveries¹. To adopt the words of the same philosopher there are two different kinds of ideas, a real and a nominal one. The nominal idea of a thing is but its definition ; and thus a simple idea is only real, for it cannot have a definition, that is, a new simple idea cannot be raised in the mind by means of words. The nominal idea or essence of a thing is simply that quality or attribute which we remark in it as the point of similarity between it and other individuals which we class with it, and which is therefore the cause of its name. This definition like all classification or naming is of course to a certain extent arbitrary, for as Dugald Stewart observes²—it does not necessarily follow that this quality is more essential to the existence of any thing as an individual than various other qualities which we are accustomed to regard as accidental. The real definition enables us to see the possibility of the thing defined, and it is this definition alone that can be made the basis of science, to which the nominal definition is not sufficient, unless it can be shown by experiment that the thing defined is possible, in which case the definition becomes

1. Leibnitz, *Nouveaux Essais sur l'Entendement Humain*, p. 324.

2. *Elements*, p. 130.

real. There is, perhaps, no such thing in the world as a perfect circle, but the definition of the circle enables us to see the possibility of the thing, and therefore the definition is allowed to rank among the first principles of the science of Geometry. The essence of a thing is but the possibility of it, and therefore does not depend upon ourselves, the mere nominal definition is arbitrary, and though there is but one essence there may be several nominal definitions of the same thing, while the real definition must be justified by the reason, which shews that it is possible, or by experience, which shews that it actually is and is therefore possible¹.

The doctrines of the Realists in the middle ages seem to have been suggested by a misconception of the philosophy of Plato which has prevailed to the present time². It has been all along supposed that Plato was a realist in the strictest sense of the word, that he believed in the independent existence of universal ideas, that he had a great passion for the marvellous and mysterious and so forth. We believe nothing of the kind. Plato may have been a bad citizen, in his heart a traitor to his country and an enemy to her institutions, but he was not a mystical dreamer or a wild enthusiast; he was the very greatest of all true philosophers, because he was the first; he was a sober clear-headed thinker, and not the less so because he had the most brilliant fancy, a mind teeming with the most poetical imagery that ever gilded the page of abstract speculation. The business of philosophy, as we have before said, is to undress the objects of sense; to take the thought away from the particular and turn it to the general. In the beginning of real philosophy this was the great thing to be done. The first philosophers, so called, were materialists and ultra-nominalists, and therefore it was Plato's object as a true philosopher to establish at least the position that truth and science cannot be found in the individuals, but must be sought after by general reasoning, that we must take general terms, the names of classes and not of individual things, if we would arrive at any valuable conclusions. If he had written, as Dugald Stewart might have written, on the same theme in the nineteenth century, after the world had enjoyed for many hundred years the

1. Leibnitz (*ubi supra* p. 252 foll.)

2. It is perhaps right to make an ex-

ception to a certain extent in favour of Bishop Berkeley (see *Siris*, § 338).

lights of philosophy, science, literature, and a true spiritual religion, he would have had no occasion to use allegories about chariots with winged horses, and ideas dwelling in the world of intelligence, and metempsychosis¹, and so forth. But living as he did in an idolatrous country, where every association was opposed to abstraction, and the human soul made an image-worship of its every thought, where there was no literature except poetry and annals, and these too read by few, he was obliged to set up idols against idols, to make the imagination, which had created all the elements of Greek polytheism, its own iconoclastes in favour of a rival worship, and so he spoke of ideas as things real, objective, and independent, dwelling with God in the heaven of heavens and making other things what they are by participation. Nevertheless, no one knew better than he did that this was but philosophy speaking in parables; as will appear from the consideration of a very few facts². He bases his whole system on dialectic or logic, the art of general reasoning. He knew that there could be no general reasoning leading to philosophy, or general principles, without real definitions. Now, the definition necessarily includes two things, generalization and division, or, in the words of modern logicians, it is made either *per genus* or *per differentiam*. The former process is the base of the second; the second is the development of the former. Accordingly dialectic, and therefore philosophy, depend upon generalization, and Plato's theory of ideas, as it is called, is merely the assertion of the principle that in order to general reasoning we must generalize and classify, *κατὰ γένος διακρίνειν* and *κατ' εἶδη σκοπεῖν*, which he explains very

1. The allegory in the *Phædrus* is borrowed entirely from the circumstance, that, in the Attic dialect, words referring to the use of wings are used to signify the emotions of the mind (see, for instance, Sophocles, *Ajax*, 693); a metaphor so obvious that Aristophanes makes a very lengthened joke upon it in the *Aves*, 1436-1450. If the reader wishes for an instance of the way in which Plato could spin an allegory from the common terms of poetical language, let him compare *Phædrus*, p. 251 A-D, where we have *πρῶτον μὲν ἔφριξε—οἶον ἐκ τῆς φρίκης—θερμότης—θερμανθέντος δὲ ἐτάκῃ—ζεῖ οὖν ἐν τούτῳ ὅλη, καὶ ἀνακηκίει*

—τῇ διεξόδῳ ἐγχεῖ ἐκάστη—ὥστε πᾶσα κεντουμένη κύκλῳ ἢ ψυχὴ οἰστρᾷ καὶ ὀδυνᾶται, with Sophocles, *Trachiniæ*, 831 foll.

εἰ γὰρ σφε Κενταύρου φονία νεφέλα
χρίει δολοποιὸς ἀνάγκα
πλευρὰ προστακέντος ἰοῦ

.
δεινοτάτῳ μὲν ὕδρας προστετακὼς
φάσματι;

. . . νιν αἰκίζει
ὑποφόνια δολόμυθα κέντρ'
ἐπιζέσαντα.

2. See Cousin, *Nouveaux Fragmens Philosophiques*, p. 160 foll.

clearly in the Phædrus (p. 249 B): *δεῖ γὰρ ἄνθρωπον ζυγνέναι κατ' εἶδος λεγόμενον, ἐκ πολλῶν ἰὸν αἰσθήσεων εἰς ἓν λογισμῷ ζυναιρούμενον*, and this we presume is now generally admitted. It is strange that this should have escaped the notice of so many writers on the history of philosophy; one would have thought that the connexion between him and the Pythagoreans, who made the same use of numbers, the first abstract terms in language, which he did of his ideas, would have taught them that Plato's object was only to bring forward the principles of science or general truth, to draw the first outlines of a system of logic or general reasoning, by laying down the principle of classification and generalization. His pupil Aristotle, who has grievously misrepresented his meaning, did but fill up his scheme, and it may be shown from the words of both that in talking of genera and species, categories, and universals, they meant only general terms, the necessary instruments of reasoning, the main part of the definition real, which is perpetual because it speaks only of the possible¹.

We need not search long in Plato's works without finding indubitable proofs of his nominalism, expressed in the most direct terms. For instance, in the Republic (X. p. 596 A) he begins an investigation by taking the generic name (*ὄνομα*) as a representative of the genus (*εἶδος*, *ἰδεά* which are in this passage used as identical words) and states that this is his usual method—*βούλει οὖν ἐνθένδε ἀρξώμεθα ἐπισκοποῦντες, ἐκ τῆς εἰωθυίας μεθόδου; εἶδος γάρ πού τι ἐν ἑκάστον εἰώθαμεν τίθεσθαι περὶ ἕκαστα τὰ πολλά, οἷς ταυτόν ὄνομα ἐπιφέρομεν—θῶμεν δὴ καὶ νῦν ὅτι βούλει τῶν πολλῶν. οἷον, εἰ θέλεις, πολλαί πού εἰσι κλῖναι καὶ τράπεζαι.—ἀλλ' ἰδέαι γέ που περὶ ταῦτα τὰ σκεύη δύο, μία μὲν κλίνης, μία δὲ τραπέζης.* And in the Laws (X. p. 895–6) he gives in plain words the distinction, which we have given above, between the name and the definition, the former being a *primâ facie*, the latter a scientific classification, the former a nominal, the latter a real description, *ἀρ' οὐκ ἂν ἐθέλοις περὶ ἕκαστον τρία νοεῖν;—ἐν μὲν τὴν οὐσίαν, ἐν δὲ τῆς οὐσίας τὸν λόγον, ἐν δὲ ὄνομα. καὶ δὴ καὶ ἐρωτήσεις εἶναι περὶ τὸ ὃν ἅπαν δύο.—τότε μὲν ἡμῶν ἕκαστον τοῦνομα προτεινόμενον αὐτὸ τὸν λόγον ἀπαιτεῖν, τότε*

1. Leibnitz, *u. s.* p. 254, *les Essences sont perpetuelles parcequ' il ne s'y agit que du possible.*

δὲ τὸν λόγον αὐτὸν προτεινόμενον ἐρωτᾶν αὐτὸ τοῦνομα.—ἔστι που δίχα διαιρούμενον ἐν ἄλλοις τε καὶ ἐν ἀριθμῷ. τουτῷ δὴ τῷ κατ' ἀριθμὸν ὄνομα μὲν ἄρτιον, λόγος δὲ ἀριθμὸς διαιρούμενος εἰς ἴσα δύο μέρη.—μὲν οὖν οὐ ταυτὸν ἐκατέρως προσαγορεύομεν, ἂν τε τὸν λόγον ἐρωτῶμενοι τοῦνομα ἀποδιδῶμεν, ἂν τε τοῦνομα τὸν λόγον, ἄρτιον ὀνόματι καὶ λόγῳ, δίχα διαιρούμενον ἀριθμὸν προσαγορεύοντες ταυτὸν ὄν;—ὧ δὴ ψυχὴ τοῦνομα, τίς τούτου λόγος; ἔχομεν ἄλλον πλὴν τὸν νῦν δὴ ῥηθέντα, τὴν δυναμένην αὐτὴν αὐτὴν κινεῖν κίνησιν; on which it is asked, τὸ ἐαυτὸ κινεῖν φησὶ λόγον ἔχειν τὴν αὐτὴν οὐσίαν ἥνπερ τοῦνομα ὃ δὴ πάντες ψυχὴν προσαγορεύομεν; and this is assented to. If we compare these two passages with those which we have quoted above from Occham, the chief of the Nominalists, we shall see that their opinions on the value of universals coincide.

Plato, although no philologer, had convinced himself of the fact which philology has made certain to us, that although the structure of language is a counterpart of the organization of the mind, the individual words are only arbitrary signs and therefore do not contain the truth of things. But the great talkers by whom he was surrounded and whose writings constituted the intellectual food of Athens, had arrived at the extremest point of ultra-nominalism, and had asserted that truth was to be found, not only in the fleeting phenomena of the visible world, but even in the individual words of a particular language. Plato is not to be charged with realism because he opposed this abuse of nominalism, any more than a man is to be considered an infidel who is opposed to the excesses of religious zeal. But he has been called so, because, as Aristotle says, those who are in one extreme of wrong, class in the opposite extreme of wrong all who hold to the golden mean of right.

The work in which Plato directly opposed the philological application of this ultra-nominalism, the *Cratylus*, was till very lately altogether misunderstood; we shall therefore give some account of it, and of the modern work which stands in prominent opposition to it, the *Diversions of Purley* by John Horne Tooke, as well on account of the contrast between them, and our decided opposition to the latter, as because the serious truths for the first time brought forwards in it, its connexion with the rest of Plato's system, and consequently with that philosophy which

is the beginning of human knowledge, have induced us to borrow from it the name of this book.

The utterly ridiculous and unjustifiable etymologies brought forward in Plato's *Cratylus*, and the strange mixture of joke and earnest which one finds in every page, formerly rendered this dialogue a great stumbling block to all the admirers of the philosopher. They were generally unable to determine what place in Plato's works should be assigned to it, and what was its real object. At present, however, scholars are nearly agreed as to its general meaning. That Plato, whose main object was to establish a system of dialectics as a means of inquiring after truth, should have been ignorant of the importance and necessity of establishing the connexion between ideas and words, and should not have had some sober theory of language, the dialectician's instrument, cannot be believed. On the contrary, he seems to have been continually impressed with the conviction, that his chief business was to solve, in part at least, the problem of language, for he says that language is the counterpart of the mind (*Phædrus*, p. 276 A), and that the word-maker must have a dialectician set over him (*Cratyl.* p. 390 D). The great object of Plato in all his works was to lead the mind away from its continual attraction to objects of sense, to teach us, that, if we would find truth and science, we must ascend to laws or general principles, and not confine our attention to the multiplicity of facts and individual objects (or, as he expressed it in his poetical language, we must seek for them not in the world of matter, but in the world of mind, for the former contains only shadowy representations of the realities displayed by the latter), that there is something more in man than a mere congeries of recollected experiences, and that he ought to have higher thoughts and more exalted pleasures than those which the outward world can furnish. This is the substance of his arguments with his contemporaries, on all the great questions then agitated in philosophy, and it is well known that he thought banter and irony as good a vehicle as any other for his purpose. Accordingly, when he found that words, like other outward objects, instead of being considered as merely symbols of reasoning, were themselves made the objects of examination, as if truth and science were to be discovered in sounds and signs which had no meaning, save as interpreted from within, when he found too that this

examination was carried on in the most arbitrary and capricious manner, without any regard paid even to the most obvious principles of etymology, and solely for the purpose of supporting some specific dogmas, he added to his works an exposure of these absurdities, which only differs from his other bantering treatises in having more ludicrous and extravagant theories to combat. The Eleatics and Heracleiteans in particular had made use of etymology to establish their contradictory positions, asserting that it appeared from the words themselves, the former that every thing was fixed and stationary (ἰστέσθαι), the latter that every thing was in motion (κινεῖσθαι). This furnished an excellent opportunity for ridiculing the method of both, by showing that both their systems were alike demonstrable from etymology. The Cratylus, who gives his name to the dialogue, was a disciple of Heracleitus, and, according to Aristotle¹ (or whoever is the author of the first book of the *Metaphysica*), Plato had, when young, some intercourse or acquaintance with him. The other interlocutor is Hermogenes, the brother of Calias, who is introduced as a supporter of the Eleatic doctrines. When we remember how Protagoras, the Heracleiteans, and the Eleatics are all introduced together in the Theætetus, and how in that dialogue Plato combats the two former sets of doctrines most especially, and in conjunction with one another, on grounds similar to those which he advances against Cratylus in this, we cannot avoid considering this treatise as a supplement to the Theætetus. The doctrines of Protagoras and Heracleitus coincided in many points, and particularly in their views on the nature of language; it is for this reason no doubt that Hermogenes, as the representative of the Eleatics, is made to speak contemptuously of the philological part of Protagoras' work, called Ἀλήθεια (*Cratyl.* p. 391 C), and the Homeric etymologies in this dialogue have been thought to be a hit at Protagoras, for it appears from the Theætetus (p. 152 E), that the disciples of Protagoras and Heracleitus supported by quotations from Homer the doctrine of the perpetual motion of things; also, as in the Theætetus, the Eleatics are treated with much more consideration, and all the weight of the ridicule is made to fall upon the re-

1. ἐκ νέου τε γὰρ συνήθης γενόμενος
πρῶτον Κρατύλῳ καὶ ταῖς Ἡρακλειτείοις
δόξαις, ὡς ἀπάντων τῶν αἰσθητῶν ἀεὶ

ῥεόντων καὶ ἐπιστήμης περὶ αὐτῶν οὐκ
οὔσης, κ.τ.λ. *Aristot. Metaphys.* I. c. 6.

presentative of the Heracleiteans; the banter is carried to the greatest length, when Socrates tells Cratylus that he owes the absurd derivations which he brings forward, and to all of which Cratylus assents, to the inspiration which had come upon him from his morning's talk with Euthyphron, a mad and ridiculous quack. The object of the *Theætetus* is to overthrow entirely the doctrines of Protagoras and the Heracleiteans, to show that the grounds of science are not to be sought in the province of the senses, that in fact science is neither perception nor right conception, nor even right conception combined with reasonable explanation. Now the second of these three things which science is *not*, namely, right conception, is one and the same thing with language¹; and these sophists had actually made language an object of inquiry as if science had been to be found in words: therefore it was necessary to show, not only that science was not identical with right conception, but also that there were no grounds of science in language which, although intrinsically the same with right conception, was extrinsically so far different as to merit a separate investigation; this, however, could not well have been introduced as a digression into the *Theætetus*, and therefore the *Cratylus* was written as a distinct work supplementary to the *Theætetus*. The general conclusion is given at the end of the dialogue (p. 439 A.); that as words are merely the images of things, it would be much better, even if we could most perfectly learn the nature of things from their names, to make the truth a criterion as well of itself as of its image.

The celebrated work of Horne Tooke presents in many ways a striking resemblance to the sophistical philology against which the *Cratylus* was written. It was suggested more immediately by some legal quibbles originating in the author's trial for high treason, just as the sophistical play upon words seems to have been recommended as a part of the juggling rhetoric with which the Athenian pleaders threw dust into the eyes of the dicasts, and as *Cratylus* was a partizan of the materialism of Heracleitus and Protagoras, so Horne Tooke professedly adopts the sensualism of Locke. In his philological method too he nearly resembles these old etymologers; he endeavours to establish his views by an examination of his mother tongue, chiefly, if not entirely unaided by a comparison of other languages; of his fundamental error

1. Schleiermacher *Einleitung*. p. 15.

with regard to the parts of speech we have spoken in another place. His object is to establish nominalism in its lowest and worst form, as an instrument in the hands of materialism; he endeavours to show that in the English language at least all words, however abstract or general their present use may be, are ultimately traceable to a meaning derived from sensible impressions, and from this he deduces that these words must be understood even nowadays not in their present metaphorical, but in their primitive literal sense, and consequently, that as words are the signs of ideas, and all words refer only to sensations, we have no knowledge but through our sensations. But, as Sir James Mackintosh somewhere asks, would it be just to conclude that, because all words seem to represent, originally, *visible* objects, there are neither impressions of touch, smell, sound, nor taste in the human mind? This author's most unjustifiable deductions, however, and those which are most truly in the spirit of the old Sophists, are those by which he attempts, by twisting and materializing the meaning of some of our most abstract terms, to subvert the principles of our inner subjective morality: for instance, he says, that "*truth* is nothing but what every man *throweth*; that there is no such thing as eternal, immutable, everlasting *truth*, unless mankind, *such as they are* at *present*, be also eternal, immutable, and everlasting; that two persons may contradict each other, and yet both speak *truth*, for the *truth* of one person may be opposite to the *truth* of another" (Vol. II. p. 402, 3). What is this but to reassert the old dogma of Protagoras that the individual man is the standard of all truth (πάντων μέτρον ἄνθρωπος), what is it but to leave us to the dreary conclusion, which the follower of the Sophists must needs be contented with, that he has no community either with men or with God, but remains, like another Prometheus, bound to the isolated and comfortless rock of his own personal consciousness, with all his social longings and irresistible first convictions preying like a vulture on his soul¹.

The *Diversions of Purley* still maintains its ground, censured by few², and admired by many. To oppose the extravagant

1. See Schleiermacher's remarks in the Introduction to his translation of the Theætetus (p. 172 ad fin.).

2. A Dutchman, who seems to have anticipated Horne Tooke, was less fortunate

in the result of his experiment: "Un certain Hollandais, peu affectionné à religion, avoit abusé de cette vérité (que les termes de Theologie, de Morale, et de Metaphysique sout pris originairement des choses grossières

nominalism and false philology of this work, and others of a similar stamp, is the more general object of the following pages. We bring forward against vulgar materialism, a truer and more congenial philosophy, we oppose to a narrow induction drawn from a mixed, wavering, and still spoken language, the carefully collected results of the labours of three generations of scholars, applied to a language copious, fixed, and comparatively pure, aided by the lights of comparative grammar, of a new era of the history of philology; in a word, we oppose to chimerical conjectures the results of a science founded on facts. It is time that some attempt should be made to show that the philosophy of language is so far from ministering to materialism and scepticism, that it actually stands forth as the chief confirmation of those systems, which form the basis of all that human reason has ventured to contribute to the support of religion and morality. The word is destined to teach, let it never again be made the instrument of deception.

ières) pour tourner en ridicule la Theologie et la foi Chrétienne dans un petit dictionnaire flamand, ou il donnoit aux termes des definitions ou explications non pas telles que l'usage demande, mais telles que sembloit porter la force originaire des mots, et les tournoit malignement, et comme d' ailleurs

il avoit donné des marques d' impieté, on dit qu' il en fut puni dans le *Raspel-huyss*" (Leibnitz *Nouveaux Essais sur l'Entendement humain*, p. 235). One might almost fancy that this was a description of our English etymologist, if the date and the punishment were more suitable.

CHAPTER IV.

RELATIVE POSITION OF THE GREEK LANGUAGE IN THE INDO-GERMANIC FAMILY.

BEFORE we commence our researches in the Greek language, it will be as well to mention, for the information of those readers to whom comparative philology is a new subject, in what relation this language is supposed to stand in respect to the other languages which we are about to compare with it. The time is long past when we could surround Greece with a Chinese wall¹, and content ourselves with surveying only as much of its language, religion, and history as could be discovered within these arbitrary limits. We cannot now content ourselves with meagre disquisitions about Æolian or Dorian dialects, or vague stories of Pelasgian serfs and Egyptian invaders ; we must look forth upon the great stage of universal history, and consider whether these Greeks may not have had some near relationship with those barbarians of Europe whom they enlightened by their genius, and with those barbarians of Asia whom they conquered by their valour ; whether, in fact, this same distinction of barbarian, or other-tongued, be not after all the mere offspring of ignorance, which always perceives the different before it can recognize the similar. It is now incontrovertibly established that most of the inhabitants of Europe, and a great number of the most ancient and civilized tribes of Asia, speak with greater or smaller modifications, the same language, and the time may perhaps come when it will appear as probable philologically, as it is certain historically, that every language in the world has sprung from one original speech.

At present, however, the languages of the earth are divided into great families, which present remarkable points of difference. Two of the greatest philologists of the day have concurred in recognizing three great classes or families of languages ; they are thus distinguished by A. W. von Schlegel (*Observations sur la*

1. Kruse's *Hellas*, Th. I. p. 395.

langue et littérature Provençales p. 14); *Les langues sans aucune structure grammaticale, les langues qui emploient des affixes, et les langues à inflexions*, and this arrangement is adopted by Bopp (*vergleich. Gramm.* p. 112, 3) with the following explanation: (1) Languages with monosyllabic roots, but incapable of composition, and therefore without grammar or organization: to this class belongs the Chinese, in which we have nothing but naked roots, and the predicates and other relations of the subject are determined merely by the position of the words in the sentence. (2) Languages with monosyllabic roots, which are susceptible of composition, and in which the grammar and organization depends entirely on this. In this class the leading principle of the formation of words lies in the connexion of verbal and pronominal roots, which in combination form the body and soul of the language: to this belongs the Sanscrit family, and all other languages not included under (1) and (3), and preserved in such a state that the forms of the words may still be resolved into their simplest elements. (3) Languages which consist of disyllabic verbal roots, and require three consonants as the vehicles of their fundamental signification; this class contains the Semitic languages only; its grammatical forms are produced not merely by composition, as is the case with the second, but also by means of a simple modification of the roots. It is with the second only of these three classes that we intend to trouble ourselves; the relationship of the different members of this family may be now considered as sufficiently made out, and the principles of their etymology are well known to us, so that any inference from one of them to another is safe and profitable. Previously to pointing out their connexion and relative antiquity, as far as this is known, or may be deduced from the grammatical structure, we will make a few remarks on the separate idioms.

This great class of languages, extending from India to the British Isles, has been called the Sanscrit, Indo-Germanic, or Indo-European family. We shall adopt the second of those names, because it points at once to the two most important branches of the family, the Indian and Teutonic languages, and is free from the vagueness which attaches to the term Indo-European, for there are languages in Europe which have no established affinity with this family. Besides, we believe that all the mem-

bers of the family are deducible from these two great branches, and the rigorous examination to which they, in particular, have been subjected, places them in a prominent position in regard to the other idioms, which are not only less important, but also less known.

We begin, then, with the German languages, which are of the highest interest to us, because our own language in its fundamental element, and the oldest part of the Greek, to the elucidation of which our present efforts are mainly directed, belong to the oldest branch of this set. The German languages are divided into two great branches, usually known as Low German and High German. The former, which is the older, was spoken in the low countries to the north of Europe: the latter was the language of the more mountainous districts of the South; whence their distinctive names. There is every reason to conclude that the Low Germans entered Europe from Asia long before the High Germans, and that they were driven onwards to the north and east by the overwhelming stream of the subsequent invasion: this appears not only from their geographical position, but also from the internal evidences of relative antiquity, furnished by the languages themselves.

The Low German includes (1) the Scandinavian languages, Icelandic, Swedish, and Danish; (2) the Low German dialects, peculiarly so called, Anglo-Saxon, Frisian, Flemish, and Dutch; (3) the old Gothic, or, as Bopp calls it, the German Sanscrit. We mention the languages in this order, namely those farthest from Asia first, not only on account of the position, but also because the languages in their internal structure stand in this relation of antiquity. With regard to our own language, it has been truly remarked, that the Low Saxon and Scandinavian element seems to have overpowered the Anglian, and thus, although we call ourselves English (Anglians), the Celts, whom we drove into the mountains, were more correct in calling us Sassenach (Saxons). "The Danes and Low Saxons with the English use no prefix *ge*, which the Anglo-Saxons did: Dan. *helligt*; Engl. *hallowed*; A.-Sax. *ge-halgud*: it would appear, therefore, that the Saxon element prevailed over the Anglian in the formation of our present language; and the Celtic name for English, both in Wales and Scotland, is Sassenach¹." The Saxons, like

1. Winning, p. 119.

the Germans, seem to have derived their names directly from Asia. A tribe of the Sacæ, who dwelt by the Caspian, and were therefore, as will be seen, Low Iranians, occupied Bactriana and and the most fertile part of Armenia, and extended in a westerly direction towards the Euxine; they were called *Sacassani* (according to Pliny *Hist. Nat.* VI. 11), and their country *Σακασσηνή* (Strabo, p. 511); and it is supposed by the most eminent antiquaries that these were no other than the *Saxones*, i.e. *Saca-sunu*, or “Sons of the Sacæ.”

The High German is simply divided into three classes, or rather three stages of existence, the Old, Middle, and New High German. The latter, which took its origin in Upper Saxony, and which owes its present position, as the written language of all Germany, to the influence of Luther, who was from Upper Saxony, is probably the modern representative of the language which was spoken on the confines of Upper and Lower Germany, which may account for its presenting, in some degree, the combined features of the two sets of languages.

The most widely extended idiom of the Indo-Germanic family is the Slavonian: it is spread over a wide surface of Europe and Asia, from the Pacific to the Baltic, from the Adriatic to the Arctic sea. The different tribes who spoke this language were known to the ancients under the names of Rhoxolani¹, Krobyzi², Sarmatæ, Sauromatæ, Pannonians, Illyrians, and Venedi or Wenedæ: at present it is spoken in Europe by the Russians and Rusniaks, the Bulgarians, Servians, Bosnians, Dalmatians, Croats, the Wends and Sorbs in Lusatia and Saxony, the Slovaks in Hungary, the Bohemians, Moravians, Poles, and Silesians.

Closely connected with the Slavonian, but not so widely diffused, are the Lithuanian languages; this set comprises the Lithuanian proper, Lettish, and Old Prussian. From grammatical considerations, which we cannot here enlarge upon, we have no hesitation in placing Slavonian and Lithuanian, the agreement

1. The Rhoxolani are mentioned by Strabo (p. 114, 294, 306) as the last of the known Scythians. From them Russia derives its name. “The Finns distinguish the Muscovites by the name of Rosso-lainen, or Russian people, and call themselves and nations of their own kindred

Suoma-lainen. The word Rosso-lainen, heard and written by a Greek, would be Rhoxolani” (Prichard, *Celtic Nations*, p. 16).

2. The Krobyzi mentioned by Herodotus (IV. 49) are supposed to be the same with the Russian *Kriwizen*.

of which is universally acknowledged, in the same class with the oldest Low German dialects.

The Celtic nations, the claim of whose speech to a place in the Indo-Germanic sisterhood has lately been established, appear to have been the oldest inhabitants of Europe, but, by the pressure of subsequent immigrations, they have been thrust out to the extreme corners of the continent. They now appear as the Erse in Ireland, the Gaelic in Scotland, the Manx in the Isle of Man, the Welsh and the Cornish in this kingdom, the Bas Breton in France, and the Basque in Spain. Arndt has shown that they were also connected, to a certain extent, with the Finns, the Samoiedes, and the Mongols, nations, like themselves, detruded to the uttermost parts of the earth. The Celtic languages resemble the German in admitting of a twofold division, into the Low or Older Celtic, and the High or New Celtic: the former comprehends the Erse, Gaelic, and Manx; the latter, the Welsh, Cornish, and Breton idioms. The Low Celtic seems to have made its way into Europe by the north of the Black Sea, the High Celtic by Asia-Minor.

These are all the European languages which belong to the great Indo-Germanic family, with the exception of the Greek and Latin, which we have purposely omitted, till after we have spoken of the Indian members of the family which contribute so much to the accurate classification of the European idioms. Arguing from what we know of the etymology and grammatical structure of the languages we have mentioned, we should not hesitate to class together with the Low German, in its oldest form, the Low Celtic or Erse, the Lithuanian, and the Slavonic languages; and, with the Old High German, the High Celtic only. By this we mean, that, though all these languages spring from the same Asiatic source, the idioms which we find in the extremities of Europe, in the peninsulas, and on the northern and western coasts, are due to tribes who entered Europe at an earlier period, and were driven onwards by subsequent emigrants; and we are able to ascertain from these languages themselves that such is the case.

If we turn to the Eastern members of the family, we shall easily find a rational explanation of this division. It appears, then, that the origin of these languages is traceable to Irân, a country bounded on the north by the Caspian, on the south

by the Indian Ocean, on the east by the Indus, and on the west by the Euphrates. Within these limits were spoken, so far as we can make out, two languages which bore the same relation to one another that we recognize as subsisting between Low and High German, a language analogous to the former being spoken in the north and east of the district, and one analogous to the latter in the south. Although the latter extended to the sea coast, yet, as the inhabitants who spoke it were mostly mountaineers (*Herod. I. 71*), we are justified in adopting, as applicable to these two languages, the same distinctive epithets which use has conferred upon the two great divisions of the German languages, and we will call the southern High Iranian, the northern and eastern Low Iranian. The surrounding nations belonged to the Mongul family, but, when the mighty people confined within these comparatively narrow limits had become too numerous for the country they lived in, the eastern and northern tribes sent off emigrations to the south-east and north-west, breaking through or driving before them the tribes by whom they were hemmed in. Those, however, which went off to the north-west were more powerful or more enterprising than the emigrants who took a south-easterly course, for while the former carried the Low Iranian dialect all over Asia and Europe to the islands of the west, the latter mastered only the northern part of Hindostan, and perhaps also to a certain extent a few of the islands of the Polynesia. The proof of this colonization of Europe and Northern India, by the inhabitants of northern and eastern Irân, rests upon the agreement of the languages spoken by the oldest inhabitants of India and Europe, and on the obvious derivation of the names of the earliest tribes in both from the country which afterwards became Media. The former of these grounds confirms the other: for when we find that the ancient Indians spoke the same language with the Low German tribes in Europe, and that the names of both are derivable from the same district, we are forced to conclude, that they are both the offspring of a people who dwelt in the country to which their names point, and spoke a language which was the mother of their sister-idioms.

And first, with regard to the Median origin of the old name of Northern India, it is to be observed, that, according to Herodotus (*VII. 62*), the Medes were in ancient times called *Arians*

by all the world—ἐκαλέοντο δὲ πάλαι πρὸς πάντων Ἄριοι. Now *âryas* is a Sanscrit word signifying “noble,” “splendid,” “well-born,” and the Hindus applied this epithet to themselves in contradistinction to the rest of mankind, whom they called *Mlêch’has*, just as the Hellenes distinguished themselves from the Barbarians (*Asiatic Researches*, VII. p. 175, and Schlegel *études des langues Asiatiques*, p. 70). That this name bore the same signification out of India, appears from the fact, that those kings of Cappadocia, who boasted of Median extraction, called themselves *Aria-rathes*; this is obviously the Sanscrit adjective *ârya-rathas*, “mounted on a splendid chariot,” used as an epithet of warriors and kings, as *mahâ-rathas*, “mounted on a great chariot,” is constantly applied by the oldest Indian poets (see e. g. *Bhagavad-Gita* I. sl. 4, 6, 17, &c.). Moreover, the name *Ariana*, in ancient times, undoubtedly included the whole of the northern provinces of the Persian empire: even when Strabo wrote it extended over part of Persia, Media, Bactria and Sogdiana (p. 724, comp. Steph. Byz. s. v. Ἄριοι). This name appears as *Airaiênê* in the Zend books, and is now contracted into *Irân*, much in the same way as *Ayôdhyâ*, the name of the old kingdom of Râmas, is shortened into the modern *Oude*. The same name may be recognized in *Arya-âvarta*, “the country of the Arians,” which is the classical name for the old country of the Hindus, and which is defined as lying between the *Vindhya* and “snowy” (*Himâlaya*) mountains, and extending from the Eastern to the Western Ocean¹. This definition excludes the Deccan, or “country to the right” (*dakshina*), and the language of the country, its geographical features, its oldest traditions, and the physical characteristics of the inhabitants, sufficiently show that the Arians or Iranians entered Hindostan by the Panjab, and did not extend themselves far towards the south². To the present day, though the northern tribes of India speak languages more or less corrupted from the Low Iranian or Sanscrit, such as the Bengálí and Hindostani, the southern languages are more akin to the Mongul idioms, which entered into the languages of middle and northern Asia. The scenes of their oldest poems,

1. *Arya-âvartah*: *puñya-bhûmir* (i. e. “the region of sanctity”); *madhyañ Vindhya-Himâlayôh* (*Am. Cosh.* p. 66. Colebrooke).

2. Schlegel sur l’*Origine des Hindous*, p. 415.

the *Mahâ-bhârata* and *Râmâyana*, are generally confined to the neighbourhood of Delhi and Oude. In the latter, the exiled hero travels to the extreme south, where he finds, among other things, innumerable hosts of apes, who do him considerable service. We consider this fable as proving that there was a striking physical difference between the Hindus and the population of southern India in the very earliest times. It appears that the aborigines of India, whom the Hindus or Arians invaded and conquered, had most of the characteristics of the negro-tribes: at least the supposed remains of these earliest inhabitants, still found in the north of India, have woolly-hair, low foreheads, and flat noses. We venture, then, to conclude that these “apes, with foreheads villainous low¹,” were nothing but the ill-formed natives of the south², who appeared to the handsome and well-proportioned Hindus as little better than monkies, just as the Greeks described the negroes of Africa as Pygmies or Cercopes, because they differed in form and stature from themselves, or as Virey would class the Hottentot with the baboon.

Secondly, as to the Median origin of the Low German tribes the following examples may suffice. That the Medes extended themselves to the north west appears from the position of Media in the historical ages. The names of many of the Low German nations point to a derivation from the north of Irân. We have seen that the Saxons or *Saca-sunu* are traceable to Bactria. The Sarmatæ or Sauromatæ, an old Slavonian nation, are expressly mentioned as descendants of the Medes (Plin. *Hist. Nat.* vi. 7). *Sarmatæ Medorum, ut ferunt, soboles.* Diodor. Sic. ii. c. 43 p. 195 Dindorf. δύο δὲ μεγίστας ἀποικίας γενέσθαι, τὴν μὲν, τὴν δὲ ἐκ τῆς Μηδίας παρὰ τὸν Τάναϊν καθιδρυθείσαν, ἧς τοὺς λαοὺς Σαυρομάτας ὀνομασθῆναι). The Sigynnæ, whose territory extended from the north of the Danube to the country of the Heneti or Veneti (Slavonian Wends), on the Adriatic, in dress resembled the Medes, from whom they derived themselves; “how they could be colonists of the Medes,” adds Herodotus (v. 9), “I cannot understand; but any thing may

1. *The Tempest*, Act IV. Sc. 1.

2. In the gem, a copy of which Schlegel has prefixed to his edition of the *Râmâ-*

yana, the attendant apes of Râma appear as men with the faces and tails of apes.

happen in time." Now the abode which Herodotus assigns to the Sigynnæ falls within the limits of the Sauromatæ who were a Slavonian tribe, and also derived from the Medes. Accordingly, the Sigynnæ must have been themselves Slavonians, whether they were the Huns, as some suppose, or not. Besides, Strabo describes the Sigynnæ as living near the Caspian with habits similar to those which Herodotus ascribes to them (p. 520). Therefore, we cannot doubt that they were a Low Iranian people. In the same manner we might point out traces of a north Iranian pedigree in the case of every nation of the Low German class of which any mention is made by ancient writers. We consider even the invasions of the Scythians by the Persians, mentioned by the Greek historians, as traditions of the pressure of the High on the Low Iranians, for the identity of the names Scythians, Getæ, and Goths has been long recognized.

The argument from the language is decisive of the whole question. The resemblances between the old Low German dialects and the Sanscrit, even after a separation for thousands of years, are so striking that an eminent philologist has said "when I read the Gothic of Ulphilas I could believe I had Sanscrit before me." On the whole, then, we consider it as nearly certain that the Hindus in India and the Low Germans in Europe are emigrants from the country about the southern extremity of the Caspian sea. We do not pretend to say when the emigration took place, nor do we suppose that it took place at once. As the population became too numerous for the country, or as they were pressed upon from without, they would naturally send off streams of invaders to the right and left in search of other settlements.

The term *Sanskrit*, by which we distinguish the old Iranian idiom that formed the basis of the North Indian and Low German dialects, is an epithet used by the Brahmins to designate the language in which their books of law and religion are written, the depositary of their ancient poetry and philosophy; it implies that this language possesses all its flexions and grammatical forms, that, in fact, it is removed from the corrupting influences of everyday use. The original word *San-s-kṛita* is a compound: the first syllable is the preposition *Sam* "with" (σύν); the second, the passive participle *kṛita* (-tas, -tâ, -tam), of the crude verb *kṛi*

“to make,” (*creare, cerimonia, कर्पाव*); and a silent *s* is interposed; its literal meaning is “done, made, or formed completely” (*confectus*), “perfect”, “highly polished”, “regularly inflected”, “classical.” This epithet seems to have been applied to the old language of Northern India to distinguish it from another class of old languages not so elegant and complete, called the *Prâ-kṛita*, a word composed in a similar manner, and signifying “low,” “vulgar,” “common.” In fact there are three divisions of the written languages of India; these are, to use the words of Colebrooke (*Asiatic Researches* Vol. VII. p. 200 Engl. reprint), “(1) *Sanskrit*, a polished dialect, the inflexions of which, with all its numerous anomalies, are taught in grammatical institutes. This the dramatic poets put into the mouths of Gods and of Holy personages. (2) *Prâkrît*, consisting of provincial dialects, which are less refined, and have a more imperfect grammar. In dramas it is spoken by women, benevolent genii &c. (3) *Mâgadhî*, or *Apa-bhrançā*, a jargon destitute of regular grammar. It is used by the vulgar, and varies in different districts: the poets accordingly introduce into the dialogues of plays a provincial jargon spoken by the lowest persons in the drama.” The word *apa-bhrançā*, derived from *bhraç* “to fall down,” signifies a word or dialect which has fallen off from correct etymology; the native grammarians use it to signify “false grammar” as opposed to Sanskrit, in the sense of “duly formed”, “regularly inflected.” The force of the grammatical term Sanskrit as a name for a sacred language will be duly appreciated by all who know that the old grammarian Pânini, was esteemed as a sort of demigod, and was said to be grandson of the inspired legislator Dêvala, and its application from the description of the kind of language to the designation of a particular ancient language is perfectly analogous to the use of the word *gramática* by the early Italian writers to signify the Latin language: thus Boccacio (*Decam.* VII. 6) describes a good Latin scholar as *un gran valentuomo in gramatica*, and Varchi gives the following distinction (*Dialogo sopra le lingue*, p. 335) *Tutte le lingue, che non sono Latine o gramaticale, si chiamavano e si chiamano volgari.* The meaning of the term *Sanskṛita* is plainly implied in what Dante says (*Convito* I. c. 5. p. 21) *il Latino è perpetuo e non corruttibile, e il Volgare è non istabile e corruttibile.*

But although the Sanscrit has long been a dead language, and though the writings in which it is contained are much older than the earliest specimens of Greek literature, we must not suppose that it was, as we have it now, the same old Iranian idiom which was taken into Europe; on the contrary, it bears evident marks of those changes which long usage introduces into every language, and which have not operated to so great an extent in some of the sister tongues of Europe, for instance, in the Low German, Latin, and Greek. However, as we do not possess any memorials of the primeval language from which it sprung, although we might be able, from a comparison of all the languages of the family, to make a probable reproduction of its grammatical system, and as the Sanscrit does present most remarkable correspondences with the oldest European languages of the Indo-Germanic family, we must be content to take it as the representative of the old Low Iranian, and therefore in the following pages have made more use of it than of any other language of this family, in our endeavours to restore the oldest forms of Greek words.

When history tells us that the Median empire was overthrown by the Persian, this is a distinct announcement of the fact, which we might derive from philology alone, that the High Iranians pressed upon and mastered the Low Iranians; it was partly owing to this pressure, we conceive, that the streams of emigration to India and Europe were let off. We have stated that the Medians or Low Iranians spoke the primeval tongue of which the Indian Sanscrit is an offset, and which forms the distinctive element of those European dialects which are connected with the Low German. There is reason to suppose that the Low Iranian emigration entered Europe by the North of the Black Sea. Now when the Persians, a High Iranian people, intruded themselves upon the Medes or Low Iranians, it is probable that the language of the latter became tinged with the peculiarities of the Persian idiom, which was, however, nearly related to the Median, and the mixed language constituted the speech of those Persians with whom the Greeks had so much to do. The connexion of modern Persian with modern High German, even after many centuries of Arabian rule and the loss of its inflexions, was long ago perceived; and it was to one of the tribes of the Persians, the *Γερμανιοι* mentioned by

Herodotus (I. 125), that the Germans owe their name¹. We assume, therefore, that the High German dialects of Europe are due to a second Iranian invasion after the conquest of Media by the Persians, a conquest which must have taken place long before the æra assigned to it by the Greeks², and we think that the stream entered Europe by way of Asia Minor, through which their course may be geographically traced. And thus if all the European members of the family can be assigned to the two divisions of Low and High German, the former derived from that old Iranian stock which gave to India its sacred language, the latter from the great race of Persians or Germanians, the name Indo-Germanic, which has been given to the family, is doubly appropriate.

It will be proper to make some remarks here on the language of the religious books which Anquetil du Perron obtained from the Parsis of Gujarat, and which are supposed by some to contain a genuine specimen of the old language of Media. Most English orientalists are still of opinion that the Zend and Pehlvi, the languages in which these books are composed, are not genuine dialects, and all of them are agreed that the writings are at least of no very high antiquity: Colonel Vans Kennedy, indeed, goes so far as to assert that the Zend and Pehlvi are mere jargons made up of other languages (*Asiat. Journ.* Vol. xxvi. Part I. p. 109). Foreign writers, on the contrary, are generally disposed to consider the genuineness of the languages and the authenticity of the Parsi writings as incontrovertibly established: Rask was the first to undertake a serious philological defence of the Zend in particular, and Bopp and Burnouf have subsequently made a minute application of it to the purposes of comparative grammar. There are some who have held an intermediate opinion; for instance, the late Dr Leyden, Mr Erskine, and Professor von Bohlen, of Königsberg, have supposed that the Zend is genuine indeed, but only a

1. Strabo's opinion with regard to the derivation of the name from the Latin adjective *Germanus*, because the Germans were genuine Gauls (διὸ δίκαιά μοι δοκοῦσι Ρωμαῖοι τοῦτο αὐτοῖς θέσθαι τοῦνομα, ὡς ἂν γνησίους Γαλάτας φράζειν βουλόμενοι· γνήσιοι γὰρ οἱ Γερμανοὶ κατὰ τὴν Ρωμαίων διάλεκτον, p. 290), is obviously a

mere guess: but we attach considerable importance to the resemblances which he points out between the High Celts and High Germans of his own time.

2. The chronology of Persia as given by the Greeks is utterly inconsistent with that of the native histories.

dialect of the Sanscrit, like the Prâcrit, or Pâli (the sacred language of the Buddhists), and Mr Romer, in a paper lately read before the Asiatic Society (*Journal* iv. p. 363), says "it appears to him far from improbable, that the Sanscrit supplied the frame-work upon which the Zend has been constructed; whilst it is evident that, in the formation of Pehlvi, it is from the Arabic that assistance has been sought and applied, but following, particularly in the infinitives, the form of the Persian verb." A. W. von Schlegel, who is more sceptical on the subject than most of his countrymen, is rather inclined to give the Zend an intermediate place between the language of Darius Hystaspes and the Persian of Firdousi (*Etudes des langues Asia-tiques*, p. 71). It would be highly presumptuous to pronounce a decided opinion upon a question with regard to which the most eminent orientalists have held such discordant opinions. At the same time, we must express our conviction that a language like the Zend could not possibly have been invented. As far as its vocabulary and grammatical structure have been investigated, it tallies exactly with what we know of the old Persian, from the proper names and stray words mentioned incidentally by the classical writers: all these words show that the Persian must have been very near akin to the Sanscrit, and, from the fact mentioned by Herodotus (I. 139) that all Persian names ended in *s*, we may conclude that the inflexions of the language were more complete even than the Greek or Sanscrit (see Schlegel, *Indische Bibliothek* ii. p. 308, and below, Book III. Chap. 2). Now the fragments of the Zend language present us with explanations of many of these old names, its structure is very like that of the Sanscrit, and though in some points it exhibits a more modern type, as in the substitution of *h* for an initial *s*, it generally agrees in all its features with the oldest languages of the Indo-Germanic family. It is just such a language as we might expect to result from the oldest form of Low Iranian after it had been infected to a certain extent with the Persian idiom, and we believe, that, though miserably corrupted by the ignorant Destours, who did not understand the books for which they were persecuted, the Vendidad nevertheless contains the remnant of an old language spoken by the Persians in very early times, and exhibiting some strongly marked features of the Median dialect. The name simply means "Holy Book", or

“Scripture”. In this language the letter *z* generally appears, like the Greek ζ, as a representative of the softened guttural *j*. Accordingly, in the preface to the Sanscrit translation of the *Yaçna*, we find *Ijisni Jānda*, and *Pahalavi Jānda*, signifying “the *Zend* or book *Ijisni*” and “the Pehlvi book” (see Burnouf, *Yaçna*, p. xvi. note); *Zend* is also obviously the same word as the Sanscrit *Ch’kandas*, a common name for the *Vēdas* or scripture of the Hindus (*Am. Cōsh.* p. 359, Colebrooke).

We now come to the Latin and Greek languages, and trust to be able to show, that the former is entirely referable to the Low-German class, whereas some of the most distinguishing features of the latter are High German. That the Latin is the older language of the two was recognized even by those who wished to derive Latin from Greek; for they sought a connexion between the Latin as it stood and the oldest or Æolian dialect of the Greek. The fact appears still more clearly from the structure of the language. It is the tendency of all languages built upon a system of inflexions to lose these inflexions and substitute for them a system of auxiliaries and particles. Now the Greek shows a much stronger bias to this than the Latin; indeed the mere use of the definite article and the particle *αὐ* in Greek would be sufficient to decide the question of their relative antiquity. But this not only appears from the grammatical structure, but may be established from the words themselves, in consequence of a law, which Grimm has derived from an examination of the German dialects and the old classical languages (*Deutsche Grammatik*, i. p. 584), and which has been extended to the Zend and Lithuanian by Bopp (*Vergleich. Gramm.* p. 78), and placed in a very striking light by Mr Winning (*Manual*, p. 36). As we shall have occasion to recur to the subject in the following chapter, we shall only say here, that according to this law High German uses *tenués*, where the Gothic has *medials*, and the Sanscrit, Latin, and Zend, have *aspirates*; it has *aspirates* where the Gothic has *tenués*, and the last three languages *medials*; and *medials* where there are *aspirates* in Gothic, and *tenués* in the rest. The Zend sometimes corresponds to the Gothic; the Lithuanian entirely with the Latin and Sanscrit, except that it has no aspirates. The Greek sometimes agrees with the Sanscrit, Latin, &c., at other times with the old High German (Winning, p. 40 foll.). Besides the Greek and High German have prefixes

where the other languages have the same word without a prefix (Winning, p. 35). Now there can be no doubt that old High German stands lower down in the scale of these languages than the Sanscrit and Lithuanian. Therefore the Greek must have at least an important element belonging to the younger or High German class of languages. This is fully borne out by all that tradition has told us of the early population of Greece. It is distinctly stated that the Pelasgians, as they were called, that is, the oldest inhabitants of the country, spoke a language which was not Greek (*Herod.* I. 57). But we must recollect that this does not imply a radical difference of language. People, who, like the ancient Greeks, never learn any language but their own, grow wonderfully susceptible of the slightest differences of writing or pronunciation. Of this we have a striking instance in the expressions which the Greeks used in speaking of the different dialects of their own tongue. It is well known that the different petty tribes of Greece, in consequence of the numerous mountains and rivers which kept them separate, used to speak a great many varieties of the same language even in the age of history. Now, in speaking of these provincialisms, an Athenian would not hesitate to call them all *φωναί*¹, and even *βάρβαροι φωναί*², so that even the epithet *βαρβαρόφωνος* is not to be understood as implying that the difference of idiom is great or striking, but only that there is a difference. But, what is of most importance with regard to the Pelasgian languages, it appears that the old inhabitants of Italy were also Pelasgians, and there is certainly no radical difference between Latin and Greek. We are led, then, to the conclusion that these Pelasgians were simply an old or Low Iranian tribe who formed the basis of the population in Italy and Greece. If it were necessary to fix upon some particular branch of the Low Iranian, we should be inclined to select the Slavonian. It must, however, be understood, that in calling the common element of Latin and Greek a Slavonic language, we mean only that as the Slavonians, the children of the Sauromatæ³, and the most widely ex-

1. See Plato *Phædo*, p. 62 A. *Protagor.* p. 346 D.

2. *Protagor.* p. 341 C. ἄτε Λέσβιος ὦν καὶ ἐν φωνῇ βαρβάρῳ τετραμμένος.

3. See Böckh *Corpus Inscript.* II. p. 83. *Sauromatæ, Slavorom haud dubie*

parentes. We have pointed out above the Median origin of the Sauromatæ: Gatterer, quoted by Böckh in this place, derives even their name from Media. "*Gatterer (Introd. in Hist. Univ. Synchron, I. p. 75) nomen derivat a Matenis s. Matienis s.*

tended branch of the Low Iranian family, may be traced to the immediate neighbourhood of Greece and Italy, as there are singular coincidences between Latin and the oldest Greek on the one hand, and even the modern Slavonian languages on the other, and as the Greek traditions point to the Hyperborean regions¹, we may safely call the Pelasgians by a name which, though now restricted, properly describes all those Low Iranian tribes that came into immediate contact with the people of whom we are speaking. We do not exclude the claims of the Goths (or Getæ), Scythians², or Thracians, for we consider them all as but different local names for members of the Slavonian stock. The names of the Massa-Getæ, Moeso-Goths, and Mysians, are only various corruptions of one and the same original designation. Now it appears probable that the Slavonians inhabited Mysia from the very earliest times. We are told by Nestor, the oldest historian of Russia, that the ancient Slavonians were driven out of Mysia and Pannonia by the Bulgarians: he is perhaps wrong in placing this event so late as the fourth or fifth century of the Christian era, but his testimony is valuable as a tradition of the fact. If, however, the old Mysians and Slavonians were the same people, it is pretty clear that the Pelasgians were also of Slavonic origin, for the inhabitants of Mysia were evidently of the Pelasgian race³, and the Pelasgian traditions of Rome all point to that country. The argument from the agreement of even modern Slavonic with Latin and the oldest element of Greek, is still more conclusive. The resemblance of the Russian to the Latin is so striking that a modern traveller has not hesitated to assert, that the founders of Rome

Medis et voce Lithuanica SZAURE, *quæ septentrionem designat: ut Sauromatæ, sint Medi septentrionales. Idem recte visi sunt Syrmatæ, quos Plinius (VI. 18) prope Oxydracas Indo vicinos collocat (Cf. Ritter Vorhalle d. Gesch. p. 283), et eodem nomine Scylax ad Mæotidem.*"

1. Diodorus Sic. (II. 47, p. 198, Dindorf). ἔχειν δὲ τοὺς Ὑπερβορέους ἰδιάν τινα διάλεκτον καὶ πρὸς τοὺς Ἕλληνας οἰκείοτατα διακεῖσθαι. Clem. Alex. Strom. I. p. 225. εἰ δέ τις τὴν φωνὴν διαβάλλει τῶν βαρβάρων, "ἐμοὶ δὲ," φησὶν ὁ Ἀνάχαρσις, "πάντες Ἕλληνες σκυθίζουσι."

2. When we identify the Slavonians with the Scythians, we are speaking only of those Scythians who were immediately known to the Greeks, and were therefore Sauromatæ or Slavonians. The original Scythians, who were no doubt of the Mongolian race (Niebuhr. *Kl. Schr.* p. 361), were invaded and conquered by the Getæ and Sauromatæ, that is, by the Low Iranians, just as the old Mongolian population of India were subdued by the Hindus: and it is these Slavonians with whom the Greeks had so much intercourse.

3. Niebuhr *Hist. of Rome*, I. p. 33.

spoke the Russian language¹. It is only in the most ancient monuments of the Greek language that we can find the same coincidences, and then they are sufficiently striking. Professor Dankovsky, of Posen, has shown this, in a loose and unsatisfactory way, it is true, by an interlinear approximate translation of Homer into modern Slavonic², and a more extensive and formal comparison of Russian and Greek has been instituted by Constantini³. There are, indeed, some archaisms in Greek which are hardly explicable, otherwise than by a comparison with Slavonic and the oldest Low German. We allude to the arbitrary insertion of *i* in some words in Gothic, Slavonic, and the Bœotian and Thessalian varieties of the Æolian or oldest dialect of Greek.

The resemblance of Slavonian to Latin and the oldest element of Greek is not more remarkable than its dissimilarity, in certain points, to the Greek of the classical ages. For instance, there is a total absence of the article in the Latin and Russian, although this part of speech has generally become indispensable to those languages which have obtained a full literary developement, and is especially prominent in the Greek. This is the more singular as the Russians have never used the Roman law or ritual, or, in fact, brought themselves into any immediate contact with the Latin language, whereas the forms of the Greek church have been long established in Russia (Winning p. 121). With regard to the breaking up of the case-endings in the Slavonic declension, in which particular this branch differs entirely from the other members of the family, we must refer the reader to some good remarks by Bopp (*Vergl. Gramm. Vorr. II. ter Abth. p. iv. foll.*).

It appears then, that the common or Pelasgian element of Greek and Latin was allied to the Slavonian, or Low Iranian branch of the Indo-Germanic family. The additional or Hel-

1. "Italy and its Inhabitants: an Account of a Tour in that Country, in 1816 and 1817," by J. A. Galiffe, of Geneva. Vol. I. p. 356. foll. The convictions of this author on the identity of Russian and Latin are valuable, not because he is, but because he is not, a philologist. Mr Galiffe had no ethnographical theory to maintain, but, with only a superficial knowledge of the two languages, could not help re-

cognizing a strong family likeness between them.

2. *Homerus Slavicis dialectis cognata lingua scripsit: ex ipsius Homeri Carmine ostendit Gregorius Dankovsky. Vindob. 1829.*

3. *Δοκίμιον περὶ τῆς πλησιεστάτης συγγενείας τῆς Σλαβονο-Ρωσσικῆς γλώσσης πρὸς τὴν Ἑλληνικὴν. ἐν Πετροπόλει. 1828.*

lenic element of the Greek, which afterwards pervaded the whole language, and gave a High German character to its entire structure, seems to have come from the East by Asia Minor; at any rate, we find that the Hellenes make their first appearance in the North East of Greece. For reasons, which we have already mentioned, we believe that this new element was High Iranian or Persian. A question might be raised, whether it belonged to the High Celtic or Welsh, or to the High German, which both seem to have entered Europe from the same quarter. This question cannot be answered with any great plausibility. Our own opinion, drawn purely from philological and geographical considerations, is, that the first population of both Italy and Greece was Erse or Low Celtic. After them came the Slavonian element in each country, and then a Lithuanian element was superadded in Italy, and a Persian, High German, High Celtic, or to speak generally, High Iranian, in Greece. We think the only difference between the Welsh or High Celts, and the High Germans was, that the Welsh pushed farther towards the West and lost much of the German type by mixing with the uncivilized and unadulterated Erse tribes settled in that part of Europe. It would be absurd to attempt any precise solution of these ethnographical difficulties, but as much as we have stated seems to be sound in theory. We do not pretend to say which of the numerous early tribes mentioned by the Greek historians was Celtic, which Slavonian, and which High German¹: all that we can venture to affirm is the general fact, that there was first a Celtic, then a Slavonian, element: and that the original language, in which the Slavonian preponderated, was subsequently infected and pervaded by a High German dialect, to which the Greek language owes the most remarkable points in its wonderful structure. This last fact was deduced from the most casual comparison of Greek with even modern Persian and new High German. The resemblance which Greek bore to the Persian in particular must have been much greater formerly; so much so indeed, that a Greek could learn Persian without any difficulty; Democedes makes a witty remark in Persian before he has been long at

1. We might guess that the Arcadians were Celtic, the Pelasgians Slavonic, and the Hellenes High German, but to what

class the Leleges, Caucones, &c. are to be referred it is useless to inquire.

Susa¹, and, Themistocles, an elderly man, who had never learned a foreign tongue in his life, made himself a proficient in the language within a year².

The difference, therefore, between the old or Pelasgian and the classical or Hellenic language must have been the same in kind with that which constitutes the distinction of the whole Indo-Germanic family into two great branches, and in investigating the origin of the Hellenic forms our problem is, from the given Greek, to reproduce the Pelasgian, word,—to pass from a language, which in its known state gravitates towards the High German or Persian, to one which was entirely Low Iranian in its structure. Although we shall be careful to point out in the following pages the peculiarities which distinguish the Greek words, as we have them, from their original type, as it may be restored from a comparison of the oldest languages of the family, it may be convenient to state here, briefly and generally, what are the laws regulating the use of the consonants in the Hellenic idiom, as contrasted with what we can infer with respect to the Pelasgian or older state of this language. The Hellenic or classical Greek tolerates only four consonants at the end of words,—κ, ν, ρ, σ. The first of these forms the termination of two words only—οὐκ, and ἐκ; in the former it is a mutilation of κε, in the latter of κισ. It will be observed, too, that οὐκ never occurs before a consonant, and ἐκ never before a vowel. Of the other three consonants which may be finals, ν is often a representative of s, as in τύπτομεν. Moreover, when σ is the final letter it must not be preceded by a dental or a liquid. An analysis of the Greek language and a comparison with other members of the Indo-Germanic family assure us that in the more perfect form of the inflexions these rules could not come into application: for in the old language no consonant would ever be required to stand at the end of a word or before another consonant because no consonant is ever articulated in the primitive state of a language without a vowel following it. With a liquid, as we shall see, the case

1. *Herod.* III. 130.

2. *Plutarch. Themistocl.* XXIX. ἐνὶ-
αυτον αἰτησάμενος καὶ τὴν Περσίδα γλῶτ-
ταν ἀποχρώντως ἐκμαθών. *Cornel.*
Nepos surely exaggerates when he says—
ille omne illud tempus (annum) litteris

*sermonique Persarum dedit, quibus adeo
eruditus est, ut multo commodius dicatur
apud regem verba fecisse, quam hi pote-
rant, qui in Perside erant nati. Thucy-
dides says merely τῆς Περσίδος γλώσσης
ὅσα ἡδύνατο κατευόησε (I. 138).*

is somewhat different: the articulating vowel may be placed either before or after it; and this is the reason, why the only three consonants in common use as finals are liquids. The Greek language first cast away its final vowels and then the consonant of the suffix yielded to the laws of euphony. Besides these rules touching the final consonants there are also others respecting initial consonants, and those in the middle of a word, which are just as distinctive of Hellenism as the others. One of the most remarkable of these appearances is the tendency to reject the digamma or aspirated labial whether at the beginning or in the middle of a word. This sound has completely vanished from the Greek with which we are most conversant, though traces of it still remain in the poems attributed to Homer. The *v*-sound seems frequently to have appeared in the ante-Hellenic language preceded by δ , κ , σ , τ . In these cases either the first letter has been dropt, and the *v* somewhat modified as in $\phi\acute{\iota}\nu$ from $\sigma\phi\acute{\iota}\nu$; or what is more common the *v* has been omitted, as in $\delta\epsilon$ for $\delta\phi\epsilon$. In Hellenic the initial σ is almost always changed into *h*, a principle also observed in Zend as compared with Sanscrit, and in Welsh as compared with Erse: similarly *j* is either changed into ζ , or *h* vocalized into *i*, or assimilated, and this also takes place in Zend as compared with Sanscrit: in Slavonic the *j* appears under the form *sch*, which, we shall see, is a step towards *z* though still a step from it. Finally, the following combinations of consonants cannot take place in the Hellenic language,— $\mu\rho$, $\mu\lambda$, $\beta\nu$, $\delta\lambda$, $\rho\lambda$; but wherever they appeared in the older language we have $\mu\beta\rho$ or $\beta\rho$, $\mu\beta\lambda$ or $\beta\lambda$, $\mu\nu$, and $\lambda\lambda$. It is unnecessary to add, that these prohibitions against the use of certain consonants and combinations of consonants interfered materially with the discrimination of the root and termination, and, by ruining the inflexions, gave occasion to some of the most remarkable peculiarities of Greek syntax, such as the use of the article and of the prepositions.

CHAPTER V.

THE THEORY OF THE GREEK ALPHABET.

THE necessary prelude to an attempt to increase our knowledge of a dead language is, an inquiry into the value of the symbols or letters which have preserved and transmitted to us its written remains. All languages are made up of sounds, and of these sounds the letters are the only representatives in the case of a language no longer spoken; unless, therefore, we can to a certain extent ascertain to what sounds these symbols corresponded, we shall hardly be able to draw a profitable comparison between the language in question and the others to which it is related, nor will it be possible to explain and justify those regular permutations of letters, which time and use have occasioned in languages of the same family, if we do not discover what was the value of this notation in the first instance. To obtain this knowledge, the great philologists of the present day have laboured diligently; but though they have collected an immense mass of facts, and have heaped up materials for the future labourer to work upon, they have left so much room for arrangement and construction, that this subject is the most difficult part of our task. The Greek alphabet presents peculiarities of a most embarrassing nature. It derives its characters and their arrangement from a family of languages with which it has no immediate connexion, and the whole developement of its system of writing is at variance with the notation on which it is based. We must, therefore, consider as independent questions (1) the Semitic origin of the Greek alphabet, (2) the actual value of the different letters as used by the Greeks, and (3) the changes which take place in consonants of words as represented in the different idioms of the Indo-Germanic family. It will, however, be as well to begin with a few remarks on alphabetical writing in general.

According to the grammatical system which has descended to us from the Greeks, we are taught from our earliest years

to distinguish between vowels and consonants, and to regard them as necessarily having a separate existence. This is a notion which must be at once discarded by every one who would make any progress in philology. Language is a transfer of the thoughts to the outward world of sense: when this is effected by sounds, it is speech; when by symbols, it is writing; but as men speak before they write, every symbol is a representative of some sound: it is in itself an element of language. There are some languages in which each symbol represents a whole word; such is the case in the Chinese. But in all languages every symbol must have been significant in the first instance. Consequently, there could not be any distinction into vowels and consonants, but the alphabet must have been a syllabarium, the elements of which might or might not be independent words. "By words," says W. von Humboldt (*über d. Versch. d. menschl. Sprachb.* p. 74), "we understand the signs of individual conceptions. A syllable forms an unity of sound, and becomes a word when it obtains an independent signification, but for this a combination of several syllables is sometimes necessary. A doubled unity—of sound and conception—meets in a word." The distinction of these syllables into consonants and vowels is perfectly arbitrary. Neither a vowel nor a consonant can have any separate existence in spoken language: the consonant always requires a vowel-appendage in order to be pronounced; the vowel cannot be pronounced without an initial breathing, which is sometimes so strong as to become a definite consonant. In either case the vowel can be regarded only as a modification of its fulcrum. Hence, in all ancient alphabets, we find that the vowels are not in the first instance expressed by separate symbols, but, as the indistinct *ā* or *ē*, which originally accompanied every consonant, was in process of time developed into distinct vowel-sounds, these were denoted by various hooks or points attached to or written under the consonants to which they referred, or, at the beginning of the word, to the mark denoting the breathing with which they were pronounced. At first, then, there were only two sorts of letters,—breathings and consonants,—both of them accompanied by short vowels which were not expressed, or by modifications of these vowels expressed by certain marks pertaining to the original symbol. The first deviation from this original state would take place in those languages, which, like the Indo-

Germanic, did not use many or very various breathings, and in which the vowels assumed to themselves at an early period important functions in the grammatical organization. But even then no new symbols were invented for the vowels. It was thought sufficient to adopt for their expression more or less mutilated forms of those breathings or consonants with which they were found more constantly combined. We shall presently show, from a palæographical examination of the Greek and Sanscrit alphabets, in what manner this was effected.

(1) Semitic origin of the Greek Alphabet.

The traditional history of the Greek alphabet is well known. It is said to have originally consisted of only 16 letters, which were brought from Tyre by Cadmus, and to which 4 were added by Palamedes at the time of the Trojan war, and subsequently 4 others by Simonides of Ceos (Plin. *Hist. Nat.* VII. 56). Other inventors or importers of the alphabet are also mentioned (*Schol. Dionys. Thr. Bekk. Anecd.* p. 783), perhaps with as much reason as those to whom it is ordinarily attributed, for all that we are to understand by these traditions is, that the alphabet was of Semitic origin, and this we can discover for ourselves from an examination of the characters and their arrangement. A knowledge of this fact, however, is of the utmost importance, for all the difficulties occasioned by the Greek alphabet, have arisen from the circumstance, that its whole organization is adapted to a language as widely different as possible from the Greek, and that while the names and shape of the letters have been retained, their value has been materially altered. It will be instructive to inquire what were the original 16 letters which the Greeks derived from their intercourse with the Phœnicians, and how they came to adopt in the first instance a part only of the Semitic syllabarium, for there are certainly more than 16 of the Greek letters which agree in name and shape with the Phœnician and Hebrew as they are known to us. The fact is, in our opinion, that the original Semitic alphabet contained only 16 letters. This appears from the organic arrangement of the characters. The fundamental elements of a syllabarium are the mutes, the breathings, and the liquids. Of these the most necessary are the two first, after these would come combinations of strong breathings with mutes, or aspirated mutes, and the liquids, which are always

secondary sounds, would be introduced last of all. In most alphabets we find the mutes divided into three classes, *tenués* *p*, *k*, *t*; aspirates *ph* (*f*), *kh* (*h*), *th*; medials *b*, *g*, *d*. The first and third orders do not, however, necessarily coexist. There are some nations, as for instance our own Highlanders in Wales and Scotland, who can never, even in English words, pronounce the medials, and even in those languages which have both orders in constant use, as in the Greek, if a *tenuis* becomes a medial, an adjoining *tenuis* is also changed into a medial, as *ἑπτα*, *ἑβδομος*. The old Italian and Runish alphabets had no medials, and the Semitic nations seem to have little need of *tenués*; there is no *p* in the Arabic alphabet, and, at the present day, the

Arabs pronounce their  *caf* as *ga*. Some European nations have adopted a set of vacillating middle sounds, which sometimes approach to the *tenués*, at other times to the medials: for example, it requires a very practised ear to distinguish whether a Saxon says *Leibsig* or *Leipsik*. If, therefore, the *tenués* were so little used by the Semitic nations, we may presume that the signs for them, as distinguished from the medials, were of later introduction, and that they would take up the remaining order of mutes, the aspirates, and even the liquids, before they introduced the *tenués*. Besides the mutes and breathings, the Hebrew alphabet, as it now stands, has four sibilants *š*, *ṣ*, *ẕ*, *ṣ*. Now it is quite clear that all these four sibilants could not have existed in the oldest state of the alphabet. Indeed we have positive evidence that the Ephraimites could not pronounce *sh* (*Judges* xii. 6). We consider it quite certain, that at the first there was only one sibilant, *ṣ* or *samech*. Finally, to reduce the Semitic alphabet to its oldest form, we must omit *caph*, which is only a softened form of *coph*, the liquid *resch*, and the semivowel *jod*, which are of more recent introduction, as will be shown by and by. The remaining 16 letters appear in the following order: א, ב, ג, ד, ה, ו, ז, ח, ט, י, כ, ל, מ, נ, ס, ע, פ, ק, ר. If we examine this order more minutely, we shall see that it is not arbitrary or accidental, but strictly organic according to the Semitic articulation. We have four classes each consisting of 4 letters: the first and second classes consist each of 3 mutes preceded by a breathing, the third of the 3 liquids and the sibilant, which perhaps closed the oldest alphabet of all, and the fourth contains

the three supernumerary mutes, preceded by a breathing. The $\aleph$ breathing, which heads the first class, is a simple breathing corresponding to the *spiritus lenis* of the Greeks, the η which is placed before the second is a hard aspirate, the *spiritus asper* of the Greeks. It is not easy to determine the precise value of γ , which precedes the third order of mutes: it appears, however, to have been a kind of guttural breathing, of less frequent use, even in the Semitic languages, than either of the others, and therefore more frequently omitted in the pronunciation¹. The principles of the arrangement will better appear if we place the characters first vertically, and then in horizontal classes. According to the first system we have:

Aleph,	$\aleph$		First breathing.
Beth,	$\beth$	B	} Medice.
Gimel,	$\gimel$	G	
Daleth,	$\daleth$	D	
He,	η		Second breathing.
Var,	ϑ	BH	} Aspiratæ.
Cheth,	$\cheth$	GH	
Teth,	$\teth$	DH	

1. Speaking of the changes which have taken place in the pronunciation of the Hebrew gutturals, Ewald writes thus (*Krit. Gramm.* §. 30. 3). "The gutturals have had their pronunciation most strikingly altered. In the progressive developement of the language, these hard, and, to a certain extent, rough sounds, have been more and more softened, till at last in the most corrupt Semitic dialects, the Samaritan for instance, every thing was mixed up, and they were resolved or formally changed into mere weak breathings. Thus even Jerome calls them, according to the Latin pronunciation, vowels (*Michaelis Orient. Bibl.* IX. p. 71, 2). This gradual softening took place in an especial manner in the rough sound γ , which, as the language grew more corrupt, became softer and more like the $\aleph$. Yet the Hebrew accidence shows, that, in the older language, it was generally stronger than η . In some

words the old hard pronunciation was more faithfully retained, e. g. in $\aleph$ LXX, $\Gamma\alpha\zeta\alpha$, $\aleph$, Payav , *Gen.* xi. 19. $\aleph$, $\Gamma\omicron\mu\epsilon\rho$ x. 2, just as in some words η was gradually softened down, in others retained its harder pronunciation, e. g. $\aleph$, $\text{Pax}\eta\lambda$, $\aleph$, $\text{Pow}\beta\omega\theta$." We cannot think that γ could ever have been harder than η , which retained its value as an aspirate to the very last: in all the Semitic dialects, γ appears to have lost its pronunciation at a very early period: in the Greek transcriptions of Punic words, it is hardly ever represented by g (*Gesenius Script. Linguaeque Phœn. Monumenta*, p. 430 foll.). The fact appears to be, that it was properly a breathing intermediate to α and ϵ , peculiar to the Semitic organ, but repudiated by the more recent articulation.

<i>Lamed,</i>	ל	L	} Liquids.
<i>Mem,</i>	מ	M	
<i>Nun,</i>	נ	N	
<i>Samech,</i>	ס	S	The sibilant.
<i>Ain,</i>	ע		Third breathing.
<i>Pe,</i>	פ	P	} <i>Tenues.</i>
<i>Koph,</i>	ק	K	
<i>Tav,</i>	ת	T	

In the horizontal arrangement we shall, for the sake of greater simplicity, omit the liquids and the sibilant, and then we have :

Breathings.	Labials.	Palatals.	Linguals.
א	ב	ג	ד
ה	ו	ז	ח
ע	פ	ק	ת

In this we see, that, while the horizontal lines give us the arrangement of the mutes according to the breathings, the vertical columns exhibit them arranged according to the organ by which they are produced. Such a classification is obviously artificial; it is entirely Semitic, and if, as we shall now proceed to show, these sixteen letters constituted the original Greek alphabet, and were so arranged in that alphabet, it is an additional proof of the Semitic origin of the Greek characters; for, although it would be perfectly natural for a Phœnician to arrange his letters in such an order, no Greek could have thought of placing the *tenues*, of which he made the most constant use in his primary articulations, in the third order of mutes, and after the liquids. Before we proceed to the Greek alphabet, it will be proper to mention an objection which might be raised to the completeness of the classification which we have pointed out. It may be said that ח has no right to be considered as

an aspirate of ט, and that, therefore, there is at least one objection to our systematic arrangement of the alphabet. The Greeks considered their θ as an aspirate, not of δ but of τ, because, in their system, the tenues were antecedent to the medials, but there is every reason to believe that θ differed from ט only by the difference of Greek and Semitic articulation, and that ט corresponded in value as in name to τ. This view has been warmly advocated by Ewald. The arguments which he has advanced in support of it are as follows (*Krit. Gramm. der Hebräisch. Spr.* § 30, 1). “(1) In all Semitic languages ט is pronounced with a hard guttural utterance, like ק, while ט is the ordinary *t*. (2) In the Greek alphabet θ represents the figure, the name, and the sound of ט, but τ that of ט. And how could we account for an interchange of the two sounds in the Greek alphabet, which is throughout the genuine daughter of the Semitic? Even in the words which were of late introduction into the Greek language, ט is always represented by τ, as βῆτα, δέλτα, ταῦρος, νάτρον, from בית, דלת, תור, נתר; on the contrary, מלח makes μάλθα. (3) Accordingly the only thing which opposes itself to this obvious relation of the ט and ט is that the Septuagint generally (not always, as Montfaucon *Hexapl. tom.* II. p. 396, and others, assert, comp. σάββατον for ט and for ט II. Sam. v. 16) expresses ט by τ and ט by θ. But the authors of the Septuagint falsified the pronunciation of the consonants, as they did that of the vowels; they uttered ט with a lisp, like the Jews of the present day, and in their version placed as its representative the θ, which tolerably corresponds to their pronunciation of it.” These arguments of the great Semitic scholar have been violently combated by one of his countrymen. Redslob, in a very angry review of Ewald’s Grammar (*Seebode’s neue Jahrbücher* vol. xx. p. 72), calls this opinion about the letter ט a disgusting error, running contrary to every authority: he says the *teth* is rather the hardest *t* sound, and corresponds to the hardest sibilant צ; accordingly it is represented by τ in the Septuagint: whereas, ט is a θ, or rather, sometimes θ, and sometimes τ, according as it is *raphatum* or *dagessatum*. We do not wish to make any remarks on the improper tone which Redslob has adopted, but we are convinced that Ewald is right: and for the following reasons. In the first place, neither the Jews of the present day, nor the Sep-

tuagint translators, are any authority for the original pronunciation of the Semitic letters. Again: at the time when the sixteen letters mentioned above constituted the whole Hebrew alphabet, there was only one sibilant. Now all aspirates are approximate assibulations and the aspirated dental, in particular, often degenerates into a sibilant. There are reasons, therefore, for supposing that ϑ assumed eventually a hard sound, its original functions being discharged by some one of the newly introduced sibilants. Again, nothing is more common than for th to be supplanted by t : this substitution has taken place in every language of Europe but our own and that of Greece, and any one who has read Lucian's joke about the usurpations of τ will be aware that even the Greek language was not altogether exempt from it (*Judicium Vocalium* § 10, p. 95, 6). The occasional assibilation of the proper t , τ , is well accounted for by Ewald. But, besides these arguments, the very analogy of the arrangement, the correspondence of name, and the identity of the oldest Greek and Phœnician forms of ϑ and θ , τ and τ (Gesenius *Script. Linguaeque Phœnic. Monumenta*. pp. 30, 74 and plate I.) are a proof to us that θ corresponded to ϑ and τ to τ , although perhaps ϑ was rather an aspirate of d than of t .

It must now be shown that these 16 letters which constituted the basis of the Semitic alphabet were the same which were in the first instance introduced into Greece. At first no doubt they wrote from right to left, like their Phœnician instructors and other oriental nations, and we have still inscriptions in proof of this; afterwards they wrote $\beta\omicron\upsilon\sigma\tau\rho\phi\eta\delta\acute{o}\nu$, or as the oxen plough the field, first to the right, and then to the left; and ultimately wrote consistently from left to right. As they adopted one or the other method they turned their letters round in the direction of the writing; thus they wrote ΖΕΤΑΚΡΑΤΕΣ in the earlier times, and subsequently ΗΕΡΜΟΚΡΑΤΕΣ . Otherwise the letters differed very little from the Phœnician as may be seen from a comparison of the 1st and 2d plates in Gesenius. But of course as the Greeks made very little use of rough breathings, and a great use of vowels, they would at an early period consider the signs of the three primary breathings in the Semitic alphabet, as marks for the vowels with which they were pronounced, just as they subsequently vocalized another of the breathings. In the original syllabarium of the Semitic

nations, each symbol represented some consonant or breathing with a short vowel sound attached to it. According to the weight of the consonant or breathing, would be the weight of this vowel sound. Now it is a philological fact, which will be developed in its proper place, that there are three varieties of the primitive vowel sound, differing only in weight. The heaviest is *ā*, the lightest *ē*, and *ō* is intermediate in point of weight. Therefore as *He* was the heaviest, *Ain* the next, and *Aleph* the lightest of the three breathings, they would be uttered by the vowels *ē*, *ō*, *ā* respectively, and, when the breathings were omitted, as would very soon be the case, these three vowels would stand in their place. The alterations which the Greeks introduced at an early period in the letters which they borrowed from the Phœnicians are distinctly alluded to by ancient writers; Herodotus says (V. 58) οἱ δὲ Φοίνικες οὗτοι οἱ σὺν Κάδμῳ ἀπικόμενοι—ἐσήγαγον—ἐς τοὺς Ἕλληνας—γράμματα—πρῶτα μὲν, τοῖσι καὶ ἅπαντες χρέωνται Φοίνικες· μετὰ δὲ, χρόνου προβαίνοντος, ἅμα τῇ φωνῇ μετέβαλον καὶ τὸν ῥυθμὸν τῶν γραμμάτων—περιοίκεον δέ σφεας τὰ πολλὰ τῶν χώρων τοῦτον τὸν χρόνον Ἴωνες, οἱ παραλάβοντες διδαχὴν παρὰ τῶν Φοινίκων τὰ γράμματα μεταρρυθμίσαντες σφέων ὀλίγα ἐχρέωντο. Similarly, Diodorus (III. c. 67, p. 297 Dindorf) φησὶ τοίνυν (Διονύσιος) παρ' Ἑλλησι πρῶτον εὐρετὴν γενέσθαι Λίνον ῥυθμῶν καὶ μέλους, ἔτι δὲ Κάδμου κομίσαντος ἐκ Φοινίκης τὰ καλούμενα γράμματα πρῶτον εἰς τὴν Ἑλληνικὴν μεταθεῖναι διάλεκτον, καὶ τὰς προσηγορίας ἐκάστῳ τάξαι καὶ τοὺς χαρακτῆρας διατυπῶσαι. It is obvious that these authors allude neither to any change in the order of the letters, nor to any difference in the way of writing them, as from left to right, instead of from right to left, but to a slight alteration in the form (ῥυθμός *Herod. comp. Athenæus* III. p. 125 F. διατυπῶσαι *Diodor.*) and pronunciation (φωνή) of some few of them (σφέων ὀλίγα). With regard to the change of form it must be supposed that these authors rather spoke from a comparison of the Greek letters of their own time, with those of the Phœnicians, than from any minute antiquarian researches on the subject. But of course the change of pronunciation principally refers to the substitution of vowels for breathings.

The grammarians tell us that the original 16 letters of the Greek alphabet were α, β, γ, δ, ε, ι, κ, λ, μ, ν, ο, π, ρ, σ, τ, υ (*Schol. Dion. Thr.* p. 781). That this was not the case will

appear from the following considerations. It is well known that the sixth letter of the old Greek alphabet was not ι but Φ , $\beta\alpha\upsilon$, *vau*, or the *digamma*, as it was indifferently termed, and which, under the form 5, was used to the latest period as a mark for the number 6; therefore υ , which is said to have been a sort of substitute for this letter (*Marius Victorinus*, p. 24, 68), could not have been included in the old alphabet. We shall show presently that ι like the Hebrew *jod* was a secondary and derived letter, as was also the letter ρ . The oldest k , which was *koppa*, φ , stood next to π , and there could hardly have been two k 's in a primeval alphabet. We assert, then, that ι , ρ , and υ did not form a part of the old Greek alphabet of 16 letters, and that κ or rather φ stood after π . Omitting ι , ρ , υ , and κ from the letters mentioned by the grammarians, we have with Φ and φ only fourteen. Which were the remaining two? The letters which stood next to ϵ in the complete Greek alphabet were η and θ , and we are convinced that they followed Φ in the original 16, though the former had subsequently a very different value from that which it originally possessed. In old written monuments which have come down to us, η or H is used as the common mark of aspiration; that it originally corresponded in power to the Hebrew *cheth*, is sufficiently proved by a comparison of HAPIAP ($\eta\pi\alpha\rho$) with its Hebrew synonym חפר (*chapar*); θ also occurs in very old inscriptions. A further confirmation of the opinion that Φ , η , θ , occupied the same places in the original Greek alphabet, that *vau*, *cheth*, and *teth* did in the old Semitic, is confirmed by the fact, that, when the Greeks left off writing the Φ and employed H to represent a long ϵ , they added to τ the last letter of their old alphabet, υ and ϕ as approximate representations of Φ , and χ to replace H. The two corresponding alphabets of 16 letters, were, then, as follows:

א	ב ג ד	ה	ו ז ח ט	י כ ל	מ	נ	ס	ע	פ ק ר
'A	B Γ Δ	'E	F H Θ	Λ MN	Σ	O	Π ϕ T		

In the Greek alphabet, as it is now given in the grammars, Φ and φ are omitted, and 10 other characters added to these. When and by whom they were invented or introduced is of little importance in regard to our present purpose. Thus much may be conjectured with safety. As soon as the Greeks ceased to use Φ , and H (as an aspirated consonant), which was very

early, ν , ϕ , and χ , must have come into use; they all occur in the oldest inscriptions, indeed it is only on the *columna Naniana* that the two latter are written PH, KH, and the genuineness of that tablet has been doubted; at all events they were antecedent to ξ and ψ , which are written XΣ, ΦΣ in old inscriptions¹. The Semitic Zain (י) and Caph (כ) probably suggested ζ and κ ; of the derivation of ι and ρ we shall speak presently; ω was introduced, most probably last of all, as a mere matter of convenience. With regard to the distribution of the new letters, we can only offer a conjecture. The omission of F and ϕ left two gaps which would of course be filled up. The intervals between the different classes of letters may also be considered as breaks. They would perhaps place their Semitic additions ζ , κ in the first intervals, namely, in the place of F, and before the liquids. The position of ξ may perhaps be explained thus. The Greeks had two forms of *s*; one called *σίγμα*, and used by the Ionians, the other named *σάν*, and used by the Dorians (*Herod.* I. 139). The latter is supposed to have had the pronunciation *sh*, and to have been derived from *Shin* as the former was from *Samech* (see Böckh *Staatshaushaltung* II. p. 386. *ad fragm. Pindar.* p. 581. Gesenius *Script. Linguaeque Phoen. Mon.* p. 66, and the passages quoted by the former). Now the *σάν* very soon fell out of use (even Pindar calls it *κίβδηλον*), and was no doubt supplanted by ξ which represents the same sound in the corresponding words of cognate languages. When therefore *σάν* and *σίγμα* were both represented by the latter sound, the *σάν* would be left out and *σίγμα* transferred to its place, which is that of the Hebrew *Shin* before τ , and the place of *σίγμα* would be filled by ξ : ρ , which in Greek was most usually formed from σ , would naturally be placed close to it in the interval after Π, caused by the omission of ϕ . It will of course be understood that we consider *σάν* as well as the Hebrew *Shin* more recent than the original alphabet of 16 letters. They placed ι next to θ , with which, as we shall see, it was connected. The reason for the places of ν , ϕ , χ we

1. The reason of this combination appears to be, that σ is considered as a sort of aspirate, and therefore like other aspirated letters communicated its rough breathing to the preceding letter: thus we have

ΕΠΙΔΕΧΣΟΝΙ for ἐπὶ Δέξωνι, ΕΧΣΑΜΟΥ for ἐκ Σάμου, ΓΡΥΦΣ for γρύψ, &c. The same is the case with ρ : thus we have ἄθρεκτοι for ἀτάρακτοι (*Hesych.*) and φροίμιον for προίμιον, &c.

have before mentioned; ψ and ω are put last, as the least essential and the last introduced.

(2) Analysis of the Greek alphabet.

We have now seen in what state the Semitic syllabarium was imported into Greece. Before we proceed to consider, how the Greeks modified and adapted to their own language a notation, which, though organically perfect in respect to the Semitic articulation, was but a poor instrument for the expression of the language of Homer, and what value they put on the different characters, it will be as well to examine with some minuteness the Sanscrit alphabet, which was unconnected with the Semitic, and, at the same time, a most suitable and complete exponent of a language the same in kind with that of ancient Greece. The Sanscrit alphabet, called by the native grammarians *Dēva-nāgarī* or “the writing of the Gods,” consists of forty-eight characters, which are arranged according to an admirable system. First of all are placed the simple vowels, then the diphthongs and the marks representing the final sounds of *n* and *h*. After these come the consonants divided into three classes, mutes, semivowels, and sibilants. The mutes are subdivided into five orders, according to the organs by which they are uttered. Besides these divisions the whole alphabet forms two great classes, *surds* and *sonants*¹. “The term *surd*,” says Wilkins (Grammar p. 15), “is applicable to such letters as, in the first effort to form them, admit of no vocal sound: and the term *sonant* to such letters as are attended by an audible murmuring, as it were, of the voice.” The *surds* are the two first letters of each of the five orders of mutes, one being aspirated and the other unaspirated, together with the sibilants, and the aspirate which is classed with them. All the rest of the consonants, and all the vowels and diphthongs are *sonants*. The table which follows gives the Sanscrit letters with the transcription in English, which we have adopted in the following pages.

1. Sir Graves Haughton distinguishes them also as *sharps* and *flats* (*Beng. Gram.* p. 151).

Vowels ; all sonant.

Simple vowels अ *a*, आ *ā* ; इ *i*, ई *ī* ; उ *u*, ऊ *ū* ; ऋ *ri* or *r*,

ॠ *rī* or *rr* ; लृ *lrī* or *lr*, लृ *lrī* or *lrr*.

Diphthongs ए *é*, ऐ *ai* ; ओ *ó* ; औ *au*.

ॠ *n* ; ॡ *h*.

CONSONANTS.

(1) Mutes.

	Surd.	Sonant.
Gutturals	क <i>k</i> , ख <i>k'h</i> ;	ग <i>g</i> , घ <i>g'h</i> ; ङ <i>ng</i>
Palatals	च <i>ch</i> , छ <i>ch'h</i> ;	ज <i>j</i> , झ <i>j'h</i> ; ञ <i>ny</i> } <i>n</i> .
Linguals	ट <i>t</i> , ठ <i>t'h</i> ;	ड <i>d</i> , ढ <i>d'h</i> ; ण <i>n</i> .
Dentals	त <i>t</i> , थ <i>th</i> ;	द <i>d</i> , ध <i>d'h</i> ; न <i>n</i> .
Labials	प <i>p</i> , फ <i>p'h</i> ;	ब <i>b</i> , भ <i>b'h</i> ; म <i>m</i> .

(2) Semivowels ; all sonant.

य *y*, र *r*, ल *l*, व *v*.

(3) Sibilants ; all surd.

श *ç*¹, ष *sh*, स *s*, ह *h*.

क्ष *ksh*.

Colebrooke in his grammar gives the value of these letters as follows : *a* is pronounced as *e* in *her*, *i* in *sir*, *u* in *sun* ; *ā* as *a* in *ball* ; *i* as in *fit* ; *ī* as *ee* in *feet* ; *u* as in *pull* ; *ū* as *oo* in *pool* ; *ri* as in *merrily* ; *rī* the same long ; *lrī* as in *revelry* ; *lrī* the same prolonged ; *é* as *e* in *there* ; *ai* as *i* in *fine*, or *y* in *my* ;

1. We adopt this transcription because श so frequently corresponds to a Greek κ , and we are desirous of pointing out that it is but a softened guttural. If what we have said in this chapter with regard to the

real value of κ in Greek and Zend were as well known as we could wish it to be, we should not hesitate to adopt κ instead of ζ as a representative of the first Sanscrit sibilant.

ô as in *go* ; au as ou in *thou* ; k as c in *cause*, or k in *kin* ; kh as in *ink-horn*, or as c'h in *cachexy* ; g as in *gain* ; g'h as in *log-house* ; ng as in *sing* ; ch as in *church* ; ch'h the same aspirated ; j as in *judge* ; j'h the same aspirated ; ny as in *onyon*, and as n in *singe* ; t as in *tin* ; t'h as in *nut-hook*, or as te-h in *White-hall* ; d as in *deal* ; dh as in *red-haired* ; n as in *noble* ; p as in *pen* ; ph as in *hap-hazard* ; b as in *ball* ; bh as in *abhor* ; m as in *man* ; y as in *yet* ; r as in *run* ; l as in *hull* ; v as in *value* ; ç is a *palatal* ; “the proper sound of this letter is produced,” says Wilkins, “by applying the tip of the tongue to the forepart of the palate, and passing the voice, as in pronouncing our s ;” sh is pronounced as in *shoe*, except in the west of India, where it is nearly equivalent to kh ; it is a *lingual* ; s is pronounced as in *sin*, and is reckoned as a *dental* ; h as in *hair* ; ksh as *cti* in *fiction*. The linguals 't, 'th, 'd, 'dh, 'n, are sounds peculiar to the Indian articulation. “This series of consonants,” says Wilkins, “is pronounced by turning and applying the tip of the tongue far back against the palate ; which, producing a hollow sound as if proceeding from the head, it is distinguished by the term *mûrddhanya*, which Mr Halhed, in his elegant grammar of the Bengal languages, has translated *cerebral*.”

The marks · (n) and : (h) are called *anu-svâra*, “after-sound,” or “after-vowel,” and *vi-sarga*, “leaving out,” *ecthlipsis* ; the former is an abbreviation of nasal consonants at the end of a syllable, the latter a substitute for the letters s or r at the end of a word. The process by which the diphthongs are formed from the simple vowels is of the most extensive application in Sanscrit, and is also of importance in Greek. When a short a is placed before either of the vowels i, u, we have the diphthongs é=āĩ and õ=āũ ; this change is called *guṇa* or “strengthening” ; when, again, the ā is placed before the diphthongs é, ó, we have the other diphthongs ai=āāĩ, and au=āāũ ; this change is called *vriiddhi* or “increment”. It must be remarked that â is also a *guṇa* of ā, and the other vowels r lṛ become ar, al by *guṇa* and âr, âl by *vriiddhi*. “The vowel lri is only found in the verb *klrip* and its derivatives. We remember no instances of the long lri in any Sanscrit word : Bhattoji, in commenting on Pânini, I. 1, 9, says that it is not used. *Siddhântakaumudî*, fol. 1. b.” (Rosen, *Journal of Education*, VIII. p. 340 note).

An examination of the figures, which compose this wonder-

fully systematic alphabet, will lead to very important conclusions with regard to the subject now before us. It is by this means alone that we can ascend from the very artificial order in which the Hindu grammarians have arrayed it to its primitive state, and to the order of its formation. In the first place, it must be remarked, that, like the Semitic alphabet, it was originally a syllabarium, in other words, it had no vowels, and was written from the right to the left. A proof of the latter is afforded by the fact, pointed out by Lepsius (*Paläographie*, p. 10), that with few exceptions all Sanscrit letters have a frame which opens towards the left; and of those too which have no frame, the vowels *i*, *î*, *u*, *û*, the guttural *ng*, and the lingual *d'* are all turned towards the left; so that the ancient order of writing must have been in that direction. The Greeks, and other nations who have borrowed the Semitic alphabet, turned round the letters when they altered the direction of their writing, whereas the Indians have left unaltered those letters which were invented or introduced before they changed their manner of writing. The only letters which were turned towards the right were the diphthongs *ê*, *ai*, three of the linguals *'t*, *'th*, *'dh*, the aspiration *h*, the semi-vowel *r*, and the suffixes which form the vowels *ṛ*, *ṛṛ* from the sign generally used to denote *a*, and the vowels *lṛ*, *lṛṛ*, from the sign for *l*. This is at least *primâ facie* evidence for the conclusion that those last characters are of more recent introduction. It may seem strange that the lingual *'d* should be older than the dental *d*, while the other letters of the dental class are older than the rest of the linguals. Perhaps ॢ and ॣ have interchanged their pronunciation like the Hebrew ב and בֵּ . It seems probable that ॢ , ॣ and । were the corresponding characters in the dental class for *d*, *dh* and *n*, and that ॥ was originally the *n* of the guttural class: । differs from ॢ only by a kind of *anusvâra* mark, and ॥ is only a reversed ॢ . After what has been said on the origin of alphabets in general, no one will suppose that the vowels were from the first distinguished from the consonants in the *dévanâgarî* alphabet. Palæography enables us to point out their origin. The characters which we have given for the vowels are used only at the beginnings of words; for their expression in the middle of words, a number of marks, analagous to the Hebrew points, are substituted as follows:

अ	a	आ	ā	इ	i	ई	î	उ	u	ऊ	û	ऋ	r	ॠ	rr
लृ	lr	लृ	lrr	ए	é	ऐ	ai	ओ	ô	औ	au				

The short original vowel, with which every consonant is articulated, is not written when it follows a consonant, because in the original syllabarium that vowel was always preserved in the first instance, and the vowel-marks were subsequently invented to point out that a different vowel-sound was intended in the particular case. The bar which designates the long $\bar{a}$ is merely a fulcrum to show that the voice must dwell longer on the syllable. It cannot be a representation of the vowel $\hat{a}$, for it is written in cases where no $\hat{a}$ is implied, as in $\bar{\Gamma}$, $\hat{o} = \hat{a}\hat{u}$. The figure which appears in the signs of a , $\hat{a}$, r , rr , $\hat{o}$ and au , is obviously a mark of the gentle breathing with which all initial vowels were pronounced, and probably corresponded as nearly as possible to the Hebrew *Aleph*. From this it appears that r , rr , were originally indistinct vowel-sounds of r preceded by a breathing. Bopp considers r as a mutilation of *ar* (*Vocalismus*, p. 157), Lepsius thinks that the consonant r was formed from this vowel (*Paläographie*, p. 49). In Zend there is no character answering to the Sanscrit r , but in corresponding words the Sanscrit r is represented by $\check{r}\check{e}$ (Burnouf *Yaçna*, p. L.). It matters very little whether we place the vowel before or after a liquid, and we constantly find the same root with the vowel sometimes before and sometimes behind the liquid. It is remarkable, that, in our own alphabet for instance, while we articulate the consonants by means of vowels placed *after* them, we always utter the necessary vowel *before* the liquids and *s*: thus we say *be*, *ce*, &c. but *em*, *en*, &c. To adduce another very familiar instance, the sign of our plural is *-ne* as well as *-en*, *-se* (written *-ce*) as well as *-es*: thus we have *breth'r-en*, *chid'r-en*, *ox-en*, but *ki-ne*, *swi-ne*, and *church-es*, *speech-es*, but *dice*, *pence*. The letter r is altogether a secondary one. In the articulations of some provinces among ourselves, it is still unpronounceable, and in almost every language it stands for some earlier letter; most generally for l , as in the Sanscrit *sûrya*, comp. *sol*, ἥλιος, Goth. *saiuil*; Sanscrit *pûr*, comp. πλέος, *plenus*, *full*, and even in modern lan-

guages, as in the words *apôtre* from *apostolus*, *épître* from *epistola*, *titre* from *titulus*, &c.; it stands for *s*, as in the Laconian *σιόρ* for *θεός*, and in the words *Valerius*, *Furius*, *arbor*, *labor*, *vapor*, *clamor* and *lares*, which Quintilian tells us (I. 4. § 13) were originally written *Valesius*, *Fusius*, *arbos*, *labos*, *vapos*, *clamos*, and *lases*. For other changes see Lepsius (*Abhandlungen*, p. 12) and Grimm (*Deutsche Gramm.* I. p. 581). It is a proof of the more recent state of the Zend in the monuments which have come down to us, that the *r* has entirely superseded the *l* in that language (Burnouf *Yaçna*, p. LXXVIII.). We believe with Lepsius, that the vowel *r* was anterior to the consonant *r*, and that the superfix, which marks this *r* in the middle of words before consonants, was the same as that which, joined to the frame by a line of connexion, constitutes the distinct consonant *Ṛ*. Lepsius thinks that the initial-vowels are all formed from the vowel-marks affixed to the consonants, and that the four nasals *Ṛ*, *Ṝ*, *Ṝ̄*, *Ṝ̄̄*, were pronounced *ung*, *ang*, *eng*, *ing* respectively, and derived from the vowels and diphthong *u*, *a*, *é*, and *i* (*Paläographie*, p. 16). The former assertion appears to be justified by his palæographical comparisons, but the latter opinion is unquestionably erroneous in principle: it is contrary to all analogy to derive consonants from the vowels with which they are articulated; but if these nasals were pronounced, as he supposes, it is possible that the initial-vowel signs may have been derived from them, though of course this could not be the case if they were formed, as he has himself shown, from the vowel-marks appended to the consonants. The nasal liquids *m* and *n* are in fact modifications of the medials *b* and *d*; a person who has a cold in his head, or a country actor trying to be impressive, will always pronounce his *b*'s as *m*'s and his *d*'s as *n*'s. We should, therefore, expect that the *m* would be derived from the *b*, and the *n* from the *d*, if the principle of association held. This appears to have been the case in Sanscrit, as will be seen from comparing *Ṃ* *bh* with *Ṃ* *m* and *Ṣ* *d* with *Ṣ*. It appears that *l* was a vowel in Sanscrit before it became a consonant; how this could be may be inferred from the use of the *l mouillé* in French. It was in fact the first form of the *r*, or rather they were both produced from a sound between the two (like the Chinese *eul*), which was the more like a vowel the older the language was (Lepsius *Abhandl.* p. 9, 10).

The first thing which strikes us in the *Dévanâgarî* consonants

is the contrast which they present to those of the Semitic alphabet. Omitting the palatals and linguals, the former of which are immediately derived from the gutturals, and the latter peculiar to the Indian organs of speech, we have the same three sets of fundamental mutes as in the Hebrew alphabet. We remark, however, this striking difference: in the *Dévanâgarî* alphabet the *tenues*, which are most suited to the pronunciation of those who speak the Indo-Germanic idioms, are placed first, the *medials* last. Besides, the Hindu grammarians have begun with those letters which are pronounced in the back part of the mouth, namely the throat, and have gone on through the others in order, ending with those letters pronounced by the lips. This is of course very good as a technical arrangement; it seems, however, that the order of creation is that given by the Hebrew alphabet, namely labials first, then gutturals, and lastly dentals. Again, it is observable that there are two orders of aspirates in this alphabet, sonants as well as surds, whereas the Greek and Hebrew have the latter only. At first probably the Hebrew aspirates were, as we have shown, modifications of the *medials*, but, if we are to place any reliance on the assertions of modern Hebraists, they all approximate to the *tenues*, and one of them, the *teth*, has actually become a dental *tenuis*. It is very certain that the Greek aspirates were modifications of the *tenues* and not of the *medials*; nevertheless, in words of the same origin the Sanscrit *bh*, *dh*, are represented by the Greek and Latin ϕ , *f*, and θ : thus the Sanscrit root *bhr* corresponds to the Greek and Latin $\phi\acute{\epsilon}\rho\omega$, *fero*, and *madhu* to $\mu\acute{\epsilon}\theta\upsilon$: *ph* seldom occurs, and *th* is consistently represented by τ . This indicates in our opinion a change in the value of the *Dévanâgarî* characters, analogous to that which we have hinted in the case of *d* and *d'*, *n* and *ng*; for there can be no doubt, that, if the *tenues* were really anterior to the *medials* in this alphabet, their aspirates would be first used: besides, we find in these secondary aspirates a continual shifting and interchange as well in form as in usage, which shews that they had not a distinct independent existence from the first; Ψ which is in form only a modification of Φ is often represented by the same letter in cognate languages, thus *dhan* = $\theta\acute{\alpha}\nu\omega$, *gharma* = $\theta\acute{\epsilon}\rho\mu\eta\varsigma$; Ψ and χ are interchanged, thus *dhr* and *bhr* both signify "to carry." The aspirates of the guttural class are very seldom used,

but, when they are, *kh*, not *gh*, corresponds to the Greek χ , as in $\kappa\omicron\gamma\chi\eta$ compared with *çankha*; $\acute{\omicron}\nu\nu\chi$ -s ($\acute{\omicron}\nu\nu\chi\omicron\varsigma$) compared with *nakha*, &c. We think that *th* must have been originally an assibilation rather than an aspirate of *t*. It will be shown in another place that the Greek ζ or assibilated δ is a representative of a sound resembling *sh* or the French *ch*, produced by combining a guttural or a dental with *y*. Such a sound is the Sanscrit $\ç$, which is almost always a representative, under a softer form, of the Greek κ , and of the Lithuanian *sz* which is pronounced in the same way as the Sanscrit letter. It is the tendency of all languages to soften or assibilate their hard sounds. We have plenty of instances of this even in the modern languages of Europe; in French it is particularly common, thus from *camera* we have *chambre*, from *audere*, *oser*, from *canis*, *chien*, &c.; in England we have in the North, where the older Saxon is rife, *kirk*, *wick* (*Alnwick*), *brigg*, *dyke*, &c., which in the South are softened to *church*, *wich*, (*Greenwich*, *Brom-wich-ham*), *bridge*, *ditch*, &c. In the ancient languages the same thing is observable: thus the older forms preserved in $\delta\acute{\alpha}\kappa\rho\nu$, *lacryma*; $\acute{\iota}\kappa\kappa\omicron\varsigma$, $\acute{\iota}\pi\pi\omicron\varsigma$, *equus*; $\delta\acute{\epsilon}\kappa\alpha$, *decem*; &c. are softened into the Sanscrit *açru*, *açva*, *daça*, and the Lithuanian *aszara*, *aszwa*, *deszimtis*, &c. This change of the hard pronunciation of *c* has taken place without a corresponding change of form in the modern Italian, and is regulated by the appearance of the vowels *e* or *i* after it. The same is the case with the *g* in English, Italian, and French. A good instance of the change in the pronunciation of a dental caused by the addition of *i* or *y* is furnished by our way of pronouncing such words as *nation*, *revolution*. Different languages have various methods of expressing the sound *sh*, as resulting from an aspiration or assibilation of the gutturals and dentals: and sometimes the same language has several symbols for it. The Sanscrit, for instance, has a direct representation, or rather, two distinct signs for it; in other alphabets it is represented by *z*, *j*, *y*, or, in the case of the dental, by θ . The symbol *j* often degenerates into the simple vowel *i*, just as the symbol *v* which represents the labial aspirate degenerates into the vowel *u*: in fact, this is the way in which these vowels are formed, and in this case it may be said, that all that part of the softened consonant which bore any relation to the original consonant, is lost, a phenomenon

which often presents itself in language, and which is also an explanation of the change of aspirated consonants into *h*, and of their interchange with one another. We may take this opportunity of correcting a theory which has been brought forward by two of the most distinguished philologists of the present day, and which, though highly ingenious, appears to us to rest upon a false principle. Grimm (*Deutsche Gramm.* I. p. 187) justly remarks that $j : i = v : u$, and that the row of labials *p, b, f, v, u* is parallel to the row of gutturals *k, g, ch, j, i*; but then he supposes that each of these series is derived from the vowel which forms the basis of it, whereas we are convinced that no mute was ever derived from a vowel, still less the original mutes *p* and *k*. He asks (1) why the dentals do not also rest upon some vowel as a basis? and (2) how we are to reconcile with the above parallelism, the obvious analogy of the row of dentals *t, d, th, s* to the row of gutturals *k, g, ch, h* and to that of the labials *p, b, f, v*; in other words, why do the gutturals possess a double support, *j* and *h*? Burnouf (*Yaçna*, p. cxiv. Note 46) has attempted to remove the former difficulty by establishing from the Zend language an analogy between *a* and *h*, so that the dentals are derived from *a* through *h*, according to the following table:

<i>k</i> — <i>a</i>	<i>t</i> — <i>a</i>	<i>p</i> — <i>a</i>
<i>g</i> — <i>a</i>	<i>d</i> — <i>a</i>	<i>b</i> — <i>a</i>
<i>χ</i> — <i>a</i>	<i>θ</i> — <i>a</i>	<i>φ</i> — <i>a</i>
<i>γ</i> — <i>a</i>	<i>z</i> — <i>a</i>	<i>v</i> — <i>a</i>
	<i>h</i> — <i>a</i>	
<i>i</i>	<i>a</i>	<i>u</i>

To derive *h* from *a* is somewhat difficult; it is certain, on the contrary, that the character for *a* is derived in all alphabets from that denoting a weak breathing not amounting to *h*. The vowels *i* and *u* are formed from consonants, but it is in vain to attempt the establishment of a parallelism throughout the three orders of mutes in reference to the formation of the three fundamental vowels *a, i, u*. The vowel *a* is presumed in the existence of every letter, and, as we have shown, assumes the two lighter forms of *e, o* in heavier combinations. The vowels *i, u* are of totally different origin; they are derived from the ultimate vocalization of weakened consonants. The

latter results from the vocalization of *v*, the weakest form of the labial; the former is the common offspring of the dentals and gutturals, the softened dental (= *ty*) and the softened guttural (= *gy*) being equally represented by *z* or *j*, and equivalent to *sh*. The dental aspirate *th* passes at once into *s*; conversely we meet with people every day whose articulation does not admit of their pronouncing a final *s* otherwise than as *th*. This view of the connexion between *th*, *s*, *sh*, *y*, *j* is borne out in a remarkable manner by the corresponding characters of the *Dévanâgarî* alphabet. That ङ, the sign for *j*, was originally the same as य, *y*, is clear from झ, the older sign for *jh*: थ, *th*, differs from श, *ç*, only by the tail, which seems to be the distinguishing mark of the *s*: this tail is clearly seen in झ, and that ष, *sh*, originally had it, may be inferred from ष, *k-sh*. The same confusion, which we have before pointed out in the gutturals, linguals, and dentals, seems to have converted into a simple *d* of the dental class the figure द, which appears from its tail to have been the assibilated *d* of the lingual class; in fact, the lower part of ह, the sibilant of the *lingual* class, is nothing more nor less than this same द. We have already pointed out the similarity of म and भ; there is an equally striking resemblance between ब, *b*, and व, *v*, which are similarly connected. The vowels *i* and *u*, which are derived from *j* and *v*, are designated in the *Dévanâgarî* by derived symbols. The initials इ, *i*, and उ, *u*, are composed of the tail ३ and the hook ७ joined to the bar at the top by an unmeaning line of connexion (see Lepsius, *Paläographie*, p. 16). The latter is the essential part of व inverted, and the former is that tail which distinguishes the sibilants and झ. With regard to Grimm's second question, it is to be observed that not only from the analogy of all languages, but also from a consideration of the form in Sanscrit (for द has no frame and is turned towards the right), the aspirate must be considered of subsequent formation. In Greek it resulted from the digamma, from the gutturals, and from *s*. In Zend it is generally derivable from the sibilant. In German it mostly comes from gutturals, and we may consider it as more particularly attached to that class of consonants. As all sounds are of two primitive kinds, breathings or consonants, from a combination of which the aspirated consonants are produced, we may

consider the aspirate as the final state of an aspirated consonant. In fact, consonants may be reduced to four ultimate states without becoming vowels; a dental or a guttural may become *j* (*y*) or *s* (*h*), a labial may become *v*; vocalization is effected in the former case by converting *s* into *h*, and then omitting the aspirate, or by turning *j* into *i*; in the latter by simple conversion of *v* into *u*. When a dental or guttural is reduced to *j*, it may always become *i*; when to *s*, it may always become *h* by *visarga*; when a labial is reduced to *v*, it may always become *u*; and when a consonant is composed of *s* and *v*, it may become indifferently either *h* or *j* (*y*) from the one element, or *u* from the other.

We are now prepared to discuss the various difficult points connected with the Greek alphabet, and to estimate the real value of those characters about which so much has been said. It will be found that in this as in other questions people have fruitlessly perplexed themselves with details, when a proper consideration of the principles would have disentangled all the confusion, and left no real ground for doubt or uncertainty. The pronunciation of the unaspirated mutes and liquids may fairly be presumed to be the same as that which all nations have adopted for those letters; for there is no reason whatever to suppose the contrary. The only characters which we have to consider are those representing, either in their earliest or in their subsequent state, breathings, or aspirated, or assibilated consonants. These are *α*, *ε*, *ζ*, *Ϝ*, *η*, *θ*, *ι*, *ξ*, *υ*, *φ*, *χ*, *ψ*. Of the first we have already spoken: it is simply the *Aleph* א, or *A-kârah* א, stript of its breathing, and is therefore the fundamental vowel with which every consonant in the old syllabarium was articulated. That *ε* and *υ* were originally pronounced with an aspiration is clear from their names *ἔ ψιλόν*, *ὐ ψιλόν*. The former is, as we have seen, derived from the Hebrew *He* ה, the sign of the aspirate, which, as the hardest breathing, is articulated with the lightest form of the fundamental vowel: this aspirate being omitted, the vowel becomes *ἔ ψιλόν*, or the *He* without aspiration. We must consider *ὐ ψιλόν*, which always retains its original aspirate at the beginning of a word, in connexion with *Ϝ* the most troublesome letter of the old Greek alphabet.

It has been shown, that, in name and form, *Ϝ*, the *vau* or *digamma*, corresponds to the Hebrew *Var*, as *H* does to *Cheth* and *θ* to *Teth*. It also appears that these three Hebrew cha-

racters were originally the aspirated medials, though subsequently they approached nearer to the *tenues*. The Greek organs of speech were, from the first, more favorable to the *tenues*, and therefore we must consider their aspirated mutes as belonging to that order, for they had not two orders of aspirates like the Indians. In general, as we have before stated, the Greeks had no great predilection for rough breathings, and as the language advanced from its oldest to its most classical written state, it lost most of those which it originally possessed. When ϵ , which was the mark of aspiration in the Semitic alphabet, was converted into the symbol of a vowel, H , which in the same alphabet was the aspirate of the guttural order, was used for the simple aspirate, and a new symbol χ was introduced as the aspirate of the guttural *tenuis* κ or φ . The Φ , too, must have been originally the aspirate of the labials, namely bh or ph , but it assumed a different value, fell out of use, degenerated into a breathing, or was vocalized into υ and therefore ϕ was introduced as the proper aspirate of the labial *tenuis*. It is not our intention to tire the reader's patience with an enumeration of the various opinions which have been entertained with regard to the digamma: the scholars who have written about it, have for the most part been unable to avail themselves of the resources of comparative philology, by the aid of which alone we can hope to solve the problem, and therefore our knowledge of the subject has advanced but little since the point was first mooted by Bentley¹. It will be far better in this place to state plainly and at once what are the results to

1. This great scholar was the first to discover the traces of a lost digamma in the frequent occurrence of an hiatus in Homer. It has been made a matter of complaint by continental scholars that so little is known of Bentley's opinion about the digamma. An edition of Homer, with his marginal notes, was lent to Heyne by Trinity College, Cambridge, but not the copy-book in which he had written his views on the subject more at length. This manuscript is not, as Thiersch calls it (Gr. Gr. § CLXII.), "a full and elaborate treatise, in which he goes through the digammated words in alphabetical order and overthrows all apparent objections to his

doctrine": it is merely a set of rough notes, in which the words supposed to have had the digamma are enumerated, the passages in which they appear copied out, and, in some cases, the necessary emendations are suggested. But there is a total absence of order or arrangement, and it is not fit for publication. We have given, in an appendix to this chapter, all of it that appears to be of any value or interest, as well to show how little could be done for the doctrine of the Greek alphabet without the aid of comparative philology, as to afford another proof how far Bentley was in advance of his age in this as in other points.

which a comparison with the cognate languages has enabled us to arrive, results consistent not only with themselves, but also with all that the ancient writers have told us with regard to the power and functions of this letter, and with the phenomena which it presents in the Greek language. In all the languages of the Indo-Germanic family we find in some of the most common and important words, as well at the beginning as in the middle, traces more or less distinct of a letter compounded of the two consonants, one of which represents the guttural, the other the labial, in its ultimate state. These two consonants are *s* (sometimes reduced to *h*), and *v*; and from their combination, and the different changes which they separately and together admit of, arises that great variety of letters which are etymologically traced to an original identity. In by far the greater number of cases this *sv* or *hv* represents an union of the original guttural and labial *kp*; in those cases where a dental makes its appearance, it must be considered as having arisen, by a fault of articulation, from the sibilant. The regular series of transitions, which such a combination of the guttural and labial would present, may easily be described: the guttural may be represented by *k, q, g, j, s, h*; the labial by *p, b, v*; and these sets of letters may be permuted with one another to any extent. Then, either the one or the other may be dropt, and the remaining one vocalized into *i* (*y*) or *u*, according as the one retained is the guttural or labial. This process will be best shown by numerous examples. The root of the reflexive or relative pronoun (which we shall show to be the same in a future chapter) is properly *kpā* or *kvā* in all the Indo-Germanic languages. This appears as *pwy* in Breton, as *qvis, qvi, svus* (*suus*) in Latin, as *sva* in Sanscrit, as *σφε¹* in Greek, as *hvas* in Gothic, as *quilk* in Old Scotch, and, by a change of the letter, as *who* in modern English. By an omission of the labial

1. This word alone might have sufficed to teach our Greek scholars that the digamma was occasionally something more than a mere labial breathing. In such lines as Πηλείδης δὲ σάκος ἀπὸ Φέο (*hvéo* or *σφέο*) χειρὶ παχειῇ (*Iliad* xx. 260) it is clear that the digamma represents a double consonant. It is, however, generally true that in the Hellenismus, with

which alone we are acquainted, the digamma very seldom makes its appearance as a double letter, yet the guttural element is as often retained as the labial, as we may see, among other things, in the number of words originally digammated which are written with a *γ* in Hellenic. To look for the digamma in its full form we must go back to the old Pelasgian language.

element, this becomes *să*, softened into *yă* or hardened into *kă*, in Sanscrit, *ós*, *κος*, *έ*, *ι*, in Greek, *se* in Latin, in English *who* (when pronounced *hoo*), and in French *que* (pronounced *ke*) &c. By an omission of the guttural element it becomes in Greek *πίς*, *ποῦ*, &c., in German *wer*, in English *what* (pronounced *wat*), &c. Similar changes are the following; Sanscrit *çvâ* (*çvan*), Zend *çpan*, old Persian *çpaka*¹, Russian *sabac*, Greek *κύων*, with a loss of the labial *canis*, with a softening of the guttural *chien*, with a substitution of the aspirate (the labial being only retained in the vowel *u*) *hund*: Latin *equus*, Zend *açpa*, Lithuanian *aszwa*; by assimilation to the guttural *ἵκκος*; by assimilation to the labial *ἵππος*; by omission of the labial, Scandinavian *oek*; by softening the guttural, Erse *each*: Sanscrit *svâdu*, Latin *suavis*, (the dental being omitted as *bellum* from *duellum*); by omission of the labial and substitution of the aspirate for *s*, *ἡδύς*: Sanscrit *çvaçura*, Gothic *swaihra*, Russian *svekor*, German *schwager* Welsh *chwegrwn*; by omission of the labial *socer*, by substitution of the aspirate *έκυρός*: Sanscrit *svapna*; by aspiration of the *s* and vocalization of the *v*, *ῥπνος*: by omission of the labial *somnus*: Sanscrit *svid*, Gothic *hweits*, English *sweat*; by vocalization of the labial *sudor*; by aspiration and vocalization *ῥδωρ*; by aspiration and omission of the labial *ιδρώς*, &c. In comparing the Romance languages with the Teutonic, we find labial *w* represented either by a combination of the guttural and vocalized labial *gu*, or by the guttural *g* only: thus from *wer*, *war* we have *guerra*, *guerre*; from *ward*, *guardire*, *guarder*; from *warrant*, *guarantir*; from *Wilhelm*, *William*, *Guillaume*; from *wehr-wolf*, *loup-garou*; from *weise*, *guise*; from *σφήξ*, *vespa*, *wespe*, *guêpe*, &c. It is also remarked that Neriosengh, who translated into Sanscrit the Pehlvi version of the *Yaçna*, represents the Zend *v* by the Sanscrit *ghv* or *gv*; thus for *vôhumanô*, *hâvam*, *çâvangh* he writes *ghvahmana*, *hâguana*, *çâguamgha* (Burnouf *apud Lepsium*, *Abhandlungen*, p. 100, Note). Similarly the old Persian name *Hystaspes*, which is probably the Greek representative of the sound *Hvistaspes*, appears as *Gushtasp* in the more modern Persian historians, but as *Vistâçpa* in the

1. *Herod.* I. 110. οὔνομα δὲ τῇ γυναικὶ ἦν τῇ συνοίκεε, Κυνώ, κατὰ τὴν Ἑλλήνων γλῶσσαν· κατὰ δὲ τὴν Μηδικὴν, Σπακώ· τὴν γὰρ κύνα καλέουσι σπακα

Μῆδοι. *Justin.* I. 4. *Nutrici SPACO postea nomen fuit, quia canem Persæ sic vocant.* σπάξ, ὁ κύων παρὰ Πέρσαις. *Gramm.* *apud Hermann.* de Em. gr. Gr. rat. p. 434.

Zend books (Burnouf *Yacna* p. cvi). The following are instances of the improper substitution of dentals for combinations of this sort: the Russian *svera*, Lettish *svehrs*, old Prussian *svirs* becomes *fera* in Latin by the omission of the guttural element, unless, as Mr Winning supposes (*Manual*, p. 83), the Latin *f* had a pronunciation approximating to this compound: in the Greek *θήρ*, the guttural sibilant has passed into the dental, by a false articulation such as we often hear in English, and similar to that by which *σάλασσα* (from *ἄλς*, *sal*) has become *θάλασσα*, &c.: this becomes the tenuis-dental in the German *thier* (pronounced *teer*), and the medial-dental in the English *deer*, Anglo-Saxon *deor*: other instances of the same corruption are furnished by *τίς*, *τε* &c. compared with *κε*, *ποῦ*, *ὅς*, *sa*, *qvis*, &c., and *τέσσαρες* compared with *πίσυρες*, *chatur*, *quattor*, &c. This is also the right way of accounting for such double forms as *φλᾶν*, *θλᾶν*; *φλίβω*, *θλίβω*; *φλιά*, *θλιά*; which Thiersch (*Gr. Gr.* §. CLII. 9) supposes to have arisen from the union of *φ* and *θ*, on the analogy of *φθήρ*, which, however, has no real existence, but is only assumed by the author of the *Etymologicum Magnum* (p. 451, 13) to be the original form of *θήρ*, as deduced from *φθείρω*, according to the second derivation which he proposes. It appears, then, that where there has been at the first a combination of two letters, one of the guttural, the other of the labial class, this compound is represented in the cognate languages by any letter which can serve as a substitute for either of the elements, or by a combination of any two of such substitutes. Now, those words which are said to be affected with the digamma present continual variations from the guttural to the labial and *vice versa*, and also in very many cases exhibit a combination of letters belonging to both orders. We may therefore infer conversely, that this digamma was originally a compound of the guttural and labial, presenting, however, one at least of the elements in its ultimate state, or in the nearest approach to vocalization. Comparative philology has shown us how such a combination may stand in one language for a simple labial or guttural in another, generally for a labial; and the examination of the Greek alphabet in its relation to the Semitic, has enabled us to perceive that the Greek digamma occupies the same place as the labial *v* in the Hebrew syllabarium. We

must, then, conclude that the articulation of the older Greeks necessitated a substitution of this compound sound for the Hebrew *vau*, just as the Sanscrit translator Neriosengh substituted *gv* for the Zend *v*. The Persian or High German element which prevailed over the Slavonian in the Greek language expelled this hard sound and the sibilants from the beginnings of words, and substituted a simple aspirate, just as we see in the Zend language as compared with the Sanscrit, and in this way the real digamma vanished from the pronunciation of the Greek language, and was consequently omitted in the writing. The letters, which most generally represent a lost digamma in Greek, are β , ϕ , and ν from the labial class, the sibilant, aspirate, and γ from the gutturals, and the combination $\sigma\phi$. If ι ever stood in its place it must be as a substitute for γ , as in the Prussian pronunciation of *yott* for *Gott*, &c., and if we are to consider $\beta\acute{\alpha}\lambda\lambda\omega$, $\text{B}\acute{\alpha}\kappa\chi\omicron\varsigma$ as identical with $\iota\acute{\alpha}\lambda\lambda\omega$, $\text{I}\acute{\alpha}\kappa\chi\omicron\varsigma$ (Thiersch, § CLII. 9), the only way of explaining the translation is, by supposing that these words originally began with a digamma, or a sound composed of guttural and labial, and that β is the representative of the labial, ι of the guttural element. There are traces of such a compound sound in $\text{I}\alpha\kappa\chi\omicron\varsigma$, as we see from the fact, that the cognate words $\iota\acute{\alpha}\chi\omega$, $\iota\alpha\chi\acute{\eta}$, are always digammated when they appear in Homer. And with regard to $\iota\acute{\alpha}\lambda\lambda\omega$ likewise, we see traces of the labial, which in $\beta\acute{\alpha}\lambda\lambda\omega$ appears by itself, in the form $\phi\iota\acute{\alpha}\lambda\lambda\omega$ (See *Aristoph. Vesp.* 1348. *Pax* 434. *Hesych.* $\epsilon\phi\iota\alpha\lambda\lambda\epsilon\nu$. $\epsilon\pi\epsilon\chi\epsilon\iota\rho\eta\sigma\epsilon\nu$, $\eta\phi\iota\alpha\lambda\epsilon\nu$), and similarly v in the German *qual*, *qualm*. In $\zeta\acute{\alpha}\lambda\eta$ the ι is represented by ζ , as is often the case. The vowel o occasionally stands for the digamma, just as o has the force of w in our “one,” or the French *oiseau*. Thus the name of the town Oaxus, in Crete, is spelt $\text{F}\acute{\alpha}\xi\omicron\varsigma$ on the old coins (Mionnet, Vol. II. p. 263); and we find $\text{F}\alpha\nu\zeta\iota\omega\nu$ in an inscription from the neighbourhood of Teos (Böckh *Corpus Inscript.* II. p. 638). The name is said to point to the ruggedness of the place, and to be derived from $\text{F}\acute{\alpha}\gamma\nu\mu\iota$ (Steph. Byz. v. $\text{O}\acute{\alpha}\xi\omicron\varsigma$ — $\tau\iota\nu\epsilon\varsigma$ $\delta\epsilon$ $\delta\iota\acute{\alpha}$ $\tau\omicron$ $\kappa\alpha\tau\acute{\alpha}\kappa\rho\eta\mu\nu\omicron\nu$ $\epsilon\acute{\iota}\nu\alpha\iota$ $\tau\omicron\nu$ $\tau\omicron\pi\omicron\nu$ $\kappa\alpha\lambda\omicron\upsilon\sigma\iota$ $\gamma\acute{\alpha}\rho$ $\tau\omicron\upsilon\varsigma$ $\tau\omicron\iota\omicron\upsilon\tau\omicron\upsilon\varsigma$ $\tau\omicron\pi\omicron\upsilon\varsigma$ $\acute{\alpha}\xi\omicron\upsilon\varsigma$, $\kappa\alpha\theta\acute{\alpha}\pi\epsilon\rho$ $\kappa\alpha\acute{\iota}$ $\eta\mu\epsilon\acute{\iota}\varsigma$ $\acute{\alpha}\gamma\mu\omicron\upsilon\varsigma$). The initial o in the digammated words $\omicron\acute{\iota}\kappa\omicron\varsigma$, $\omicron\acute{\iota}\nu\omicron\varsigma$ does not appear to be a representative of the digamma which was prefixed to the whole word as it stands. By comparing $\text{F}\omicron\acute{\iota}\kappa\omicron\varsigma$ with the Sanscrit *vécan*, Latin *vīcus*, and $\text{F}\omicron\acute{\iota}\nu\omicron\varsigma$

with the Latin *vīnum*, we infer that the *o* is merely a *guna* of the root vowel in each word. The same is probably the case with *oīda* also; it appears, from a comparison with the Latin *vīdi*, Sanscrit *vēda* (root *vid*); 2nd per. sing. *oīσθα*, Sanscrit *vēttha*, Zend *vaēsta* (Burnouf *Yaçna* p. ccccli, note 315); 1st per. plur. *īdμεν*, Sanscrit *vidmas*, that the diphthong in the singular is a *guna* of the root, and that the initial *v*, which belongs to the root, is absorbed (See Pott *Etymol. Forsch.* I. p. 246 foll.). When the dental sibilant *θ* appears as a substitute for the digamma, it results from false articulation, as we have shown above.

The Latin language, in which the Slavonian element was not, as in the Greek, overpowered by the introduction of High German ingredients, retained the digamma sound to the last, though the Greek figure was not introduced until the reign of Claudius, and then again disused (*Quintil.* I. 7. § 26. XII. 10. § 29. comp. *Tacitus Annal.* XI. 14). This digamma sound is attributed by the ancient writers, not to the letter *F*, which so nearly resembles the Greek digamma in form (the only difference in the digamma introduced by Claudius being, that it was inverted), but to the letter *u* or *v*, when used as a consonant, in which case it seems to have had the sound of our *w*, as appears from the following passages. Dionysius of Halicarnassus (I. c. xx. p. 52 *Reiske*). καὶ διδόασιν αὐτοῖς χώρια—τὰ περὶ τὴν ἱερὰν λίμνην, ἐν οἷς ἦν τὰ πολλὰ ἐλώδη, ἃ νῦν, κατὰ τὸν ἀρχαῖον τῆς διαλέκτου τρόπον, Οὐ-έλια ὀνομάζεται. σύννηθες γὰρ ἦν τοῖς ἀρχαίοις Ἑλλησι, ὡς τὰ πολλὰ, προτιθέναι τῶν ὀνομάτων, ὁπόσων αἱ ἀρχαὶ ἀπὸ φωνηέντων ἐγίνοντο, τὴν οὐ συλλαβὴν ἐνὶ στοιχείῳ γραφομένην. τοῦτο δ' ἦν ὥσπερ γάμμα διτταῖς ἐπὶ μίαν ὀρθὴν ἐπιζευγνύμενον ταῖς πλαγαῖς, ὡς **Φελένη**, καὶ **Φάναξ**, καὶ **Φοῖκος**, καὶ **Φανήρ**, καὶ πολλὰ τοιαῦτα. Julian (*Orat.* XI. p. 71, edit. Spanheim). Ἐνετοὶ δὲ οἶμαι τὸ πρόσθεν ὠνομάζοντο, νῦν δὲ ἤδη, Ρωμαίων τὰς πόλεις ἐχόντων, τὸ μὲν ἐξαρχῆς ὄνομα σῶζουσι βραχεῖα προσθήκη γράμματος ἐν ἀρχῇ τῆς ἐπωνυμίας. ἔστι δὲ αὐτοῦ σύμβολον χαρακτήρ εἰς. ὀνομάζουσι δὲ αὐτὸν ΟΥ, καὶ χρῶνται ἀντὶ τοῦ ΒΗΤΑ, πολλάκις προσπνεύσεως οἶμαί τινος ἕνεκα καὶ ιδιότητος γλώττης. Priscian (p. 560). *Habebat autem hæc F litera hunc sonum quem nunc habet U loco consonantis posita.* Quintilian (I. 4. § 7). *Desintne nobis necessariae literæ—ut in his, SERUUS, et UULGUS, Æolicum digamma desideratur.* (XII. 10. § 29). *ÆOLICÆ quoque literæ, qua SERUUM, CERUUM-*

que dicimus, etiamsi forma a nobis repudiata est, vis tamen nos ipsa persequitur. From these passages we see that the later writers considered the digamma only in its labial element. It appears, however, from Quintilian, that there was another Latin letter, F, which represented the digamma in form and name, which occupied the same place in the Roman alphabet, and which corresponded to the older power of the Greek digamma, in combining, as it would seem, a sibilant with the labial. Quintilian says (I. 4. § 14), that *fordeum* and *fædus* were written instead of *hordeum* and *hædus* in old Latin: *quin FORDEUM, FÆDOSQUE (dicebant), pro aspiratione VAV velut simili litera utentes: nam contra Græci aspirare solent (Φ), ut pro Fundanio Cicero testem, qui primam ejus literam dicere non posset, irridet.* Again he says (XII. 10. § 27, 29), that it was a great disadvantage to the Roman to have only V and F instead of the Greek Υ and Φ, *quibus millæ apud eos (Græcos) dulcius spirant.*—*Nam et illa quæ est sexta nostrarum, pæne non humana voce, vel omnino non voce potius, inter discrimina dentium efflanda est: quæ etiam cum vocalem proxima accessit quassa quodammodo, utique quoties aliquam consonantem frangit, ut in hoc ipso FRANGIT, multo fit horridior.* From these passages Mr Winning has inferred, as we have already mentioned, that the Latin *f* corresponded to the Lithuanian or Slavonian double consonant *sv* or *zw*. He is also inclined to suppose that two distinct sounds were represented by the Latin *f*; one corresponded to the Greek φ, and was used in words connected with the Greek, such as *fero*, *fama*, &c.: the other, this double sound, appears only in words to which the Greeks have no corresponding forms, as in *fariolus*, *fasena*, &c., in which the *f* was subsequently changed to *h* (*Manual*, p. 266). We are willing to adopt the former opinion, that *f* was, at least originally, a double sound, consisting of a sibilant and a labial: from the manner in which Quintilian speaks of it, there must have been something very peculiar about the Latin *f*, and the description which he gives of its pronunciation would of itself lead us to suppose a sort of sibilation. But we are sure that it never approximated to the Greek φ; Quintilian most expressly tells us so, and the fact is clear from the following phenomena which are applicable to words connected with the Greek, as well as to the other words in which *f* appears. That the Greek φ is a distinct *ph*, as in *shepherd*, and that it is not equivalent in sound to the Sanscrit *bh*, which,

as well as the Latin *f*, etymologically corresponds to it (compare the Greek and Latin roots $\phi\nu$, *fu*, with the Sanscrit equivalent *bhû*), appears from reduplications like $\pi\acute{\epsilon}\phi\nu\kappa\alpha$, and from contacts like $\Sigma\alpha\pi\phi\acute{\omega}$. That the Latin *v* and *f* are cognate sounds, and have nothing in common with the Latin *b*, *p*, or with the Greek β , π , ϕ , is clear from the fact that *v* and *f* may be immediately preceded by *n*; which is always changed into *m* before the other letters: compare *conferre*, *conviva*, with *combibere*, *componere*, *imprimis*, $\epsilon\mu\beta\acute{\alpha}\lambda\lambda\epsilon\iota\nu$, $\epsilon\mu\pi\alpha\varsigma$, $\acute{\alpha}\mu\phi\acute{\iota}$ (Pott, *Etymol. Forsch.* I. p. 79). In our opinion, the letters *f* and *v* in Latin corresponded, in the time of Quintilian, to *hv* and *w* respectively; at all events, the former was an originally compound sound made up of a guttural (whether under the form of a sibilant or an aspirate), and a labial; for we hold that no labial can pass directly into a guttural, but that, in every instance where this has apparently occurred, the labial has been originally connected with a guttural: thus *fircus* must have been *hvircus* or *svircus* (Sanskrit *vrkas*, Zend *vehrkas*) before it could become *hircus*, or *hirpus*, and we think that the change of Latin words which to the last began with *f*, into *h* in the Romance languages, is a proof, that to the last *f* contained some guttural element; thus the Norman *hawk* stands for *falco*; *hors*, in French, represents the Latin *foris*, which is *fuori* in modern Italian (compare *guerra* and *guerre*); and the Spanish *hacer*, *hambre*, *hado*, *higo*, *hijo*, *hilo*, *hermoso*, *humo*, *hoja*, *hongo*, *huesa* (*hvesa*), *hurto*, are the modern substitutes for the Latin *facere*, *fames*, *fatum*, *ficus*, *filius*, *filum*, *formosus*, *fumus*, *folium*, *fungus*, *fossa*, *furtum*. We are aware that Grimm thinks there is a real connexion between the labial *v* and the sibilant and aspirate *s*, *h*. "I infer," says he, (*Deutsche Gramm.* I. p. 581) "the intimate connexion of the three breathings *v*, *h*, *s*, partly from the change of *ei* into *é* (p. 91), of *au* into *ó* (p. 94), which takes place before them, partly from the interchange of *h* and *v*, *w* (p. 148, 403), *h* and *s* (p. 318, 416), and the contact of the aspiration with the assibilation (*th*, *ts*, *z*); between *v*, *w*, and *s* there is no immediate interchange; *h* and *v*, the softest of all consonants, occasionally fall off without substitution, even when they stand at the beginning, and especially before liquids." It is strange that this great philologist should not have perceived that the arguments, which he has drawn from the vocalization of the German languages, rather prove the union

of a guttural and labial in these cases than the identity of the guttural and labial elements: the change of *ei* into $\acute{e}=ee$ before *v*, *h*, *s*, is an absorption of *i*, the guttural element of the diphthong, into the following guttural element *h*, *s*, or into the guttural element combined with and presumed in the *w*, and it is for this reason that the labial part of the *w* is often dropt in this case, the change of the diphthong remaining as a trace of the guttural part of the compound sound: conversely the change of *au* into $\acute{o}=oo$ before the same letters, shows a corresponding loss of the guttural in *h*, *s*, the labial part being alone retained. Grimm admits that there is no immediate interchange between the *v(w)* and *s*, and that *v* and *h* (which is only a further reduction of *s*) sometimes fall off without leaving any traces: this is a proof that a compound like *hv=sv* might become either *h*, *s*, or *v*, not that these letters are themselves identical. The fact is, as we have before mentioned, that Grimm has not a proper notion of the origin and value of the vowels *i*, *u*, which, we have shown, are the vocalization of *j* and *v*, the ultimate forms of the mutes, the former being the point of convergence to the gutturals and dentals, the latter to the labials. The name $\hat{v}$ $\psi\iota\lambda\acute{o}\nu$, and the fact that this letter never appears at the beginning of a word without a rough breathing, show how natural the union of the aspirate and labial are to some articulations; this vowel is to the present day pronounced like *v* by the Greeks even before consonants, and the analogy of the Sanscrit language, in which *i* and *u* are always pronounced as the consonants *y*, *v* before vowels, even when they form part of the diphthongs $\acute{e}$, $\acute{o}$, as well as the testimony of the old Grammarians, assures us that the Greek ν was *v*, or rather *hv*, before it was *u*, and that ι was *y* or *j* before it was *i*.

We may now leave the digamma, or rather its labial element, and direct our attention to the sibilants, the aspirate, and the vowel ι considered as the ultimate state of the gutturals and dentals. The gutturals are softened as follows; *k* into *ch*, *sh*, *s*: *g* into *j*, *sh*: the dentals thus; *t* into *th*, *sh*, *s*: *d* into *sh*. These changes may also be produced by subjoining to each guttural and dental the letter *y(i)*, and pronouncing the combined letters as one: the sound which results in each case is *sh*. As, then, this softening might have been effected by the addition of *i*, if that vowel had existed, conversely the vowel *i* not having

existed previously, naturally sprung from this change of the aspirates of the dental and guttural orders, the aspirated dental or guttural element being omitted; just as the vowel *u* arose from a similar softening of the aspirate of the labial order, the aspirated labial element being omitted. The Greek ζ remains as a representative of the guttural or dental combined with *i(y)*, as will hereafter be shown. In the mean time it is sufficient to state that it appears, from the forms of the comparative¹ and of the verb conjugation², and from other phenomena in Greek³, that ζ was equivalent to *κy*, *γy*, *τy*, *δy*; we know from the analogy of modern languages that these sounds may be equivalent to *sh*, and it is clear from the words of Dionysius of Halicarnassus (*de Compos.* c. 14. p. 81, Reiske) that ζ must have been sometimes pronounced like *sh=dy=gy*. He says—τριῶν δὲ τῶν ἄλλων γραμμάτων, ἃ δὴ διπλᾶ καλεῖται, τὸ ζ μᾶλλον ἡδύνει τὴν ἀκοὴν τῶν ἐτέρων. τὸ μὲν γὰρ ξ, διὰ τοῦ κ, τὸ δὲ ψ, διὰ τοῦ π, τὸν συριγμὸν ἀποδίδωσι, ψιλῶν ὄντων ἀμφοτέρων. τοῦτο δ' ἡσυχῇ τῷ πνεύματι δασύνεται, καὶ ἔστι τῶν ὁμογενῶν γενναιότατον. It has also the value σδ, which is its representative in certain dialects, and its place in the alphabet shows that it must have been considered originally as a modification of δ. The vowel ι is placed next to θ, the simple aspirate of τ or δ, because it is the last result of the softening of those letters. In some cases a Greek θ represents a Sanscrit *y*, as in χθές, *hyas*.

When the Greek ζ stands as a representative of the guttural in its softened state (thus, ζάω corresponds to the Sanscrit *jīvāmi*, Slavon. *schivú*, which contains the resolved digamma *jr*, as appears from the Lithuanian *gyws=virus*, *gywenú=vivo*, Gothic *qrivs=virus*), it is equivalent to the Zend *z*, which was nearly our *j*, as appears from the circumstance that Neriosengh uses the Sanscrit *j* as a transcription of this letter: thus he writes *Ahuramajdasya*, “of Ormuzd”, and *Ijisnijanda*, “the Zend, or book called *Yaçna*”, *Majdaîasnyah*, “the Mazdaîasnas” (Burnouf, *Yaçna*, p. xv). In related words this Zend letter stands for the Greek κ, γ, or χ, or for a Latin and Sanscrit *h* when that letter represents a strong guttural breathing: the following instances are given by Burnouf (*Yaçna*, p. LXXXI.):

1. Book II. Chap. 2.
2. Book IV. Chap. 4.

3. Book III. Chap. 1.

Sanscrit.		Greek.	Zend.	Lith.
<i>mih.</i>	Latin, <i>mingo.</i>	ὀμίχω.	<i>miz.</i>	<i>myzu.</i>
<i>hima.</i>	<i>hiems.</i>	χείμα.	<i>zyáo.</i>	<i>ziema.</i>
<i>haṇsa.</i>	Gothic, <i>gans.</i>	χήν.		<i>zasis.</i>
<i>b-hūmi.</i>	{ Latin, <i>humus.</i> } { Gothic, <i>gauī.</i> }	χαμαί.	<i>zēm.</i>	<i>zeme.</i>
<i>hr̥daya.</i>	{ Latin, <i>cor.</i> } { Gothic, <i>hairtō.</i> }	καρδία.		<i>szirdis.</i>
<i>aḥam.</i>	{ Latin, <i>ego.</i> } { Gothic, <i>ik.</i> }	ἐγώ.	<i>azem.</i>	<i>isz.</i>
<i>hasta.</i>	{ ——— hand. } { Latin, <i>pre-hend-ere.</i> }	χείρ.	<i>zasta.</i>	
<i>mahat.</i>	{ ——— magnus. } { Gothic, <i>mikels.</i> }	μέγας.	<i>maz.</i>	
<i>hari.</i>	Latin, <i>viridis.</i>	ὤχρος.	<i>zairi.</i>	

The reader will be careful to distinguish from this appearance of the *h* in Sanscrit and Latin those cases in which the initial aspiration appears in Greek as the representative of a sibilant in those languages. We have already shown, from the form of the character in the *Dēvanāgarī* alphabet, that *h* is not an original letter. It has, however, two sounds. According to one it is a hard guttural breathing, and stands as the representative either of an original guttural consonant or of the digamma. In this use it may stand either at the beginning or in the middle of a word in Latin, Sanscrit, or Low German, and it frequently resumes its original form in certain combinations. It is this *h* which corresponds to the Zend *z=j*. To the instances given above we may add the following: Sanscrit root *vah*, Latin *veh-it*, *vec-sit*, *vec-tus*, *vac-ca*, *Φόχ-os*, *Φοχεύειν*, *αὐχ-ήν*, Zend *vaz-aiti*, Slavonian *vezeti*, Lithuanian *vezu*, *vesti*; Latin *trah-ere*, *trac-si*, German *trag-en*, Lithuanian *traukti*; Latin *hostis* from *fostis* (= *svostis* or *hvestis*), German *gosts*; Gothic *haupit*, Latin *caput*, *κεφ-αλή*; Latin *homin* (*homo*), Gothic *guma*, old High German *komo*, Lithuanian *zmones*, old Prussian *smunents*; Latin *hortus*, Gothic *gards*, Old High German *karti*, *χόρτος*; Gothic *taihun*, *δέκα*, Sanscrit *daça*, &c. From this it is clear that the strong *h* is the immediate representative of the digamma or of a primitive guttural; that it is harder and more original than *j=z* (Zend) appears from the use of the

latter in reduplications from roots beginning with the hard *h*, as in *jahâmi*, *juhâva*, &c.; compare *chakâra*, *bibharmi*, &c. The other sound of *h* is merely a weakening of the sibilant, similar to the *visargah* at the end of a word, and generally makes its appearance at the beginning of the word. This breathing, as a substitute for *s*, is consistently found in languages of the Indo-Germanic family, which we infer from other reasons to be more recent than others of the same family in which the corresponding words begin with *s*: its appearance may, therefore, be used as an argument to prove that languages, of which we do not know the age from other sources, are recent in comparison with those which present the initial *s*. We have *h* for *s* in Greek as compared with Latin and Sanscrit, in Welsh as compared with Erse, and in Zend as compared with Sanscrit: now we have reason to believe, independently of this, that Greek (in one element at least) and Welsh are younger than Latin or Sanscrit and Erse respectively: we therefore conclude that Zend is younger than Sanscrit, or belongs, at least in one element, to the High Iranian class. The following are a few instances out of a great number which might be collected.

More ancient languages with <i>s</i> .			More recent languages with <i>h</i> .		
Sanscrit.	Latin or Gothic.	Erse.	Zend.	Greek.	Welsh.
<i>sâ.</i>	<i>sî.</i>	<i>sî.</i>	<i>hâ.</i>	<i>ἥ.</i>	<i>hi.</i>
<i>saptan.</i>	<i>{sibun.}</i> <i>{septem.}</i>	<i>secht.</i>	<i>hapta.</i>	<i>ἑπτα.</i>	
<i>{sam.}</i> <i>{sakrt.}</i>	<i>simul.</i>		<i>{ham.}</i> <i>{hakërēt.}</i>	<i>ἄμα.</i>	<i>evo.</i>
	<i>sal.</i>	<i>salan.</i>		<i>ἄλς.</i>	<i>halen.</i>
<i>svapnas.</i>	<i>{somnia.}</i> <i>{sléps.}</i>	<i>suan.</i>		<i>ὑπνος.</i>	<i>hyn.</i>
<i>svar.</i>	<i>sol.</i>	<i>{sawl.}</i> <i>{sornean.}</i>	<i>hvarē.</i>	<i>(ἥλιος.)</i>	<i>{heol.}</i> <i>{hinon.}</i>
<i>santi.</i>	<i>{sunt.}</i> <i>{sint.}</i>		<i>henti.</i>		

The letter *ξ*, which is a direct union of the guttural *κ* or *γ* with the sibilant, does not require much notice; in Sanscrit it is often represented by the softer form *sh*, just as *κ* is almost

consistently represented by ς . The explanation of this is not difficult. We shall show immediately that, when an aspirate or sibilant is combined with a consonant, it very often changes its place, that is, it may stand either before or after the consonant. Thus, the root of the relative pronoun, which is *sv* in Sanscrit and Greek, is *qv* in Latin, *hv* in Gothic, but *wh* in English; and $\rho = hr$ becomes *rh* in Latin. Similarly $\xi = \kappa s$, which is *hs* in Gothic, became *sh* in Sanscrit, so as to correspond in power to the Semitic *Shîn*, the name of which its common denomination ξi seems to represent. The same has been the case with ψ (*Bekk. Anecd.* p. 815). It has been mentioned above, that ξi seems to have come as a substitute for the Doric $\sigma\acute{\alpha}\nu$, the older representative of *Shîn*. The Latin *x* seems frequently to have lost the *k*-sound altogether, as in *Ulyxes* compared with *Ὀδυσσεύς*, *rixa* compared with $\epsilon\text{-}\rho\acute{\iota}\delta\text{-}s$, $\epsilon\text{-}\rho\acute{\iota}\zeta\omega$, &c.

We must now show how H, the old mark of the aspiration in Greek, came to be used as a sign for the long *e*, the first half of it being alone retained to denote the rough breathing. It is an etymological principle of great importance, that an aspirated short vowel is equivalent to an unaspirated long one. To this may be added another principle of equal importance and fundamentally the same, that an initial digamma or aspirated labial, represented by the secondary vowels *i* or *u*, may be placed behind the initial vowel so as to form a diphthong, or even be transferred to the second syllable of the word. Of both principles we have the following instances in the Greek language itself, and from one root $\epsilon\lambda\kappa$ in $\epsilon\lambda\kappa\omega$, which begins properly with the digamma, and of which we shall speak more at length in a subsequent chapter. From this root we have $\eta\lambdaεκτρον$ for $\epsilon\lambdaκτρον$, $\eta\lambdaάκατα$ and $\eta\lambdaακάτη$ for $\epsilon\lambdaκτά$ and $\epsilon\lambdaκτή$, and $\omega\lambdaαξ$ for $\omicron\lambda\xi$ according to the first principle, and $\alpha\upsilon\lambdaαξ$ for the same word, according to the second¹. The second principle is very frequently applied in transitions from Greek to Sanscrit: thus we have in Sanscrit *dévas* = $\theta\epsilon\text{F}\acute{o}s$. (*dhēvos*); *ékataras* (*aikataras*) = $\epsilon\acute{\kappa}\acute{\alpha}\tau\epsilon\rho\omicron s$; the Sanscrit *éka* = *aika* is *yak* in modern Persian, and the Sanscrit *védmi* (= *vaidmi*), *phéna* (= *phaina*), *çvêta* (= *çvaita*) correspond to the Slavonic *vjemî*, *pjena*, *svjet*. But it is not at all uncommon in Greek: thus from the last mentioned root ($\epsilon\acute{\kappa}\alpha s$, Sanscrit *ékas*, Latin *æquus* and *secus*), we have $\epsilon\upsilon\kappa\eta\lambda\omicron s$ for $\epsilon\acute{\kappa}\eta\lambda\omicron s$,

1. Buttmann *Mythol.* II. p. 355 foll.

a change which it is certainly not necessary to account for by the supposition of two digammas, as Thiersch and Buttmann have supposed. The gloss in Hesychius (γέγκαλον, ἥσυχον), which would seem to point to a form **ΓέΓκαλος**, is evidently wrong from its position between γειώρας and γεκαθά in that vocabulary: we should read γέκαλον with Guyet. Sometimes the digamma, which should have begun the word, was transferred not only to a place behind the first vowel, but even to the beginning of the second syllable, as in the following instance: ὄλος = **Φόλος**, “full” became first οὐλός = **ὄΦλος**, then ὄλ**Φ**ος, as we see in ὄλβος and ὄλβαχήιον (as it should be read in Hesychius, s. v. εὐπλουτον) from οὐλή and χέω. The same principle explains the shifting of the aspirate in such cases as ἔχω (*ek-ho*) ἔξω (*hek-so*), τρέχω (*trek-ho*), θρέξω (*threk-so*), &c. We conceive then that the adoption of H as the sign for the long vowel $\eta = \bar{e}$, is due to the fact that *hē* was actually considered as equivalent to $\bar{e}$. The vowel η actually contains, in many cases, not merely the common rough breathing, but also the digamma *hv*, and even the softened dental or guttural *dy*, *j*, as in ἐτύπην for ἐτύπγαν, or, when aspirated at the beginning of the word, as in ἥμερος for διάμερος, &c. This *j* or *y* is also represented by ϵ in the middle of a word, as in πόλεως = πόλγως; and we often find that $\bar{e}\bar{e}$ presumes a single ϵ preceded by some guttural breathing (Buttman *Ausführl. Sprl.* § 112, 17. *Anm.* 23)¹. We shall not be surprised, therefore, to find that η is also in many cases the representative of $\bar{e}\bar{e}$: thus δέελος is another form of δῆλος and ἥδεε, of ἥδη;—ἀναλύεται γοῦν τὸ η εἰς δύο $\bar{e}\bar{e}$, ὡς παρὰ τῷ ποιητῇ δέελον δ' ἐπὶ σῆμά τ' ἔχεναν καὶ συναιρεῖται πάλιν τὰ δύο $\bar{e}\bar{e}$ εἰς τὸ η , ὡς τὸ ἥδεε, ἥδη (*Schol. Dionys. Thr.* p. 797). The form of ω shows that it is a similar combination of $\bar{o}\bar{o}$.

(3) Interchange of mutes in the Greek and cognate languages.

We now come to the third subject of inquiry which we have proposed to ourselves in this chapter—the changes which take place in the mutes or fundamental consonants of related words in the different languages of the Indo-Germanic family. The liquids generally remain unaltered in the corresponding words, and the breathings we have already considered. It has been

1. Compare ἑέρση with the Sanscrit *varsha*.

perceived that the changes of the mutes, which were once thought so capricious, follow a very striking law, which was first pointed out, in its application to the Greek (Latin, Sanscrit), the Gothic, and Old High German, by that admirable philologist James Grimm (*Deutsche Gramm.* I. p. 584 foll.), and which may justly be considered as one of the most fruitful discoveries ever made in the province of language. This law has been extended by Bopp, (*Vergl. Gramm.* p. 78 foll.) to the Zend and Lithuanian. The following table will afford the best explanation of the law:

	Labials.			Dentals.			Gutturals.		
Greek, (Latin, Sanscrit),	<i>p</i>	<i>b</i>	<i>f</i>	<i>t</i>	<i>d</i>	<i>th</i>	<i>k</i>	<i>g</i>	<i>ch</i>
Gothic,	<i>f</i>	<i>p</i>	<i>b</i>	<i>th</i>	<i>t</i>	<i>d</i>	..	<i>k</i>	<i>g</i>
Old High German,	<i>b (v)</i>	<i>f</i>	<i>p</i>	<i>d</i>	<i>z</i>	<i>t</i>	<i>g</i>	<i>ch</i>	<i>k</i>

Or,

Greek, (Latin, Sanscrit).	Gothic.	Old High German.
Tenuis,	Aspirate,	Medial,
Medial,	Tenuis,	Aspirate,
Aspirate.	Medial.	Tenuis.

It must be remarked, that the Gothic aspirate to which the Greek tenuis corresponds, is not *ch*, for that combination does not exist in Gothic, but either *h* or *g* with a strong guttural aspiration. The same remark applies to the Latin, which however, consistently employs the strong *h* for the Greek *χ* (see above, p. 128.) In Old High German, *b* is superseded by *v*, a circumstance which has also taken place in the modern Greek and other languages, and instead of *th* we have *z = ts*, by assimilation instead of aspiration.

The following exemplification of the law is taken with some slight modification from Bopp; we have subjoined his comparison of the Zend and Lithuanian, with the languages included in Grimm's law:

Sanscrit.	Greek.	Latin.	Gothic.	Old High German.
<i>pâda-s</i> ,	<i>ποδ-ός</i> ,	<i>pedis</i> ,	<i>fôtus</i> ,	<i>vuoz</i> ,
<i>panchan</i> ,	<i>πέμπε</i> ,	<i>quinque</i> ,	<i>fimf</i> ,	<i>vinf</i> ,
<i>pûrn'a</i> ,	<i>πλέος</i> ,	<i>plenus</i> ,	<i>fulls</i> ,	<i>vol</i> ,
<i>pitr</i> ,	<i>πατήρ</i> ,	<i>pater</i> ,	<i>fadrein</i> (pl.)	<i>vatar</i> ,
<i>upari</i> ,	<i>ὑπέρ</i> ,	<i>super</i> ,	<i>ufar</i> ,	<i>ubar</i> ,
<i>bhang</i> ,	<i>Φρήγ-νυ-μι</i> ,	<i>frango</i> ,	<i>brikan</i> ,	<i>prëchan</i> ,
<i>bhratr</i> ,	<i>φράτωρ</i> ,	<i>frater</i> ,	<i>brôthar</i> ,	<i>pruoder</i> ,

Sanscrit.	Greek.	Latin.	Gothic.	Old High German.
<i>bhr,</i>	φέρω,	<i>fero,</i>	<i>baira,</i>	<i>piru,</i>
<i>kapāla,</i>	κεφαλή,	<i>caput,</i>	<i>haubith,</i>	<i>houpit,</i>
<i>tvām,</i>	τύ,	<i>tu,</i>	<i>thu,</i>	<i>du,</i>
<i>trayas,</i>	τρεῖς,	<i>tres,</i>	<i>threis,</i>	<i>dri,</i>
<i>antara,</i>	ἕτερος,	<i>alter,</i>	<i>anthar,</i>	<i>andar,</i>
<i>danta-m,</i>	ὀδοντα,	<i>dentem,</i>	<i>thuntus,</i>	<i>zand,</i>
<i>drau,</i>	δύο,	<i>duo,</i>	<i>trai,</i>	<i>zuéné,</i>
<i>dakshina,</i>	δέξιος,	<i>dextra,</i>	<i>taihsvô,</i>	<i>zësawa,</i>
<i>uda,</i>	ὔδωρ,	<i>unda,</i>	<i>vatô,</i>	<i>wazar,</i>
<i>çvan,</i>	κύων,	<i>canis,</i>	<i>hunths,</i>	<i>hund,</i>
<i>hrdaya,</i>	καρδία,	<i>cor,</i>	<i>hairtô,</i>	<i>hérza,</i>
<i>aksha,</i>	ὄκος,	<i>oculus,</i>	<i>augô,</i>	<i>ouga,</i>
<i>açru,</i>	δάκρυ,	<i>lacrima,</i>	<i>tagr,</i>	<i>zahar,</i>
<i>paçu,</i>		<i>pecus,</i>	<i>faihu,</i>	<i>vihu,</i>
<i>çvaçura,</i>	ἐκυρός,	<i>socer,</i>	<i>svaihra,</i>	<i>suehur,</i>
<i>daçan,</i>	δέκα,	<i>decem,</i>	<i>taihun,</i>	<i>zëhan,</i>
<i>jnâ,</i>	γνώμι,	<i>gnosco,</i>	<i>kan,</i>	<i>chan,</i>
<i>jâti,</i>	γένος,	<i>genus,</i>	<i>kuni,</i>	<i>chuni,</i>
<i>jânu,</i>	γόνυ,	<i>genu,</i>	<i>knuî,</i>	<i>chnui,</i>
<i>mahat,</i>	μέγας,	<i>magnus,</i>	<i>mikils,</i>	<i>mihil,</i>
<i>haṇsa,</i>	χήν,	<i>'anser,</i>	<i>gans,</i>	<i>kans,</i>
<i>hyas,</i>	χθές,	<i>heri,</i>	<i>gistrâ,</i>	<i>këstar,</i>
<i>lih.</i>	λείχω.	<i>lingo.</i>	<i>laigô.</i>	<i>lékôm.</i>

The following comparison shows that the Lithuanian ranks with the first three languages in the interchange of mutes.

Lithuanian.	Sanscrit.
<i>ratas</i> "a wheel,"	<i>rathas</i> "a chariot,"
<i>bûsu</i> "I shall be,"	<i>bhavishyâmi,</i>
<i>kas</i> "who,"	<i>kas,</i>
<i>dûmi</i> "I give,"	<i>dadâmi,</i>
<i>pats</i> "a husband or master,"	<i>patis,</i>
<i>panki</i> "five,"	<i>panchan,</i>
<i>trys</i> "three,"	<i>trayas,</i>
<i>keturi</i> "four,"	<i>chatvâras,</i>
<i>ketvirtas</i> "the fourth,"	<i>chaturthas,</i>
<i>szaka</i> "a branch."	<i>çâkhâ.</i>

In most cases the Zend also agrees with the Sanscrit as opposed to the Gothic.

Zend.	Sanscrit.	Gothic.
<i>tûm,</i>	<i>tvam,</i>	<i>thu,</i>
<i>chathwârô,</i>	<i>chatvâras,</i>	<i>fidvor,</i>
<i>pancha,</i>	<i>panchan,</i>	<i>fimf,</i>
<i>pěřeno,</i>	<i>pûrn'a,</i>	<i>fulls,</i>
<i>paitis,</i>	<i>patis,</i>	<i>faths,</i>
<i>paçus,</i>	<i>paçu,</i>	<i>faihu,</i>
<i>pâdha,</i>	<i>pâdas,</i>	<i>fôtus,</i>
<i>pěřçaiti,</i>	<i>prachch'hâti,</i>	<i>fraihith,</i>
<i>kô,</i>	<i>kas,</i>	<i>hvas,</i>
<i>dashina.</i>	<i>dakshina.</i>	<i>taihsvô.</i>

The Zend has no *bh*, and therefore agrees with the Gothic in the use of the medial for the aspirate.

<i>baraiti,</i>	<i>bibharti,</i>	<i>bairith,</i>
<i>brâtarēm,</i>	<i>bhrâtaram,</i>	<i>brôthar,</i>
<i>uba,</i>	<i>ubhâu,</i>	<i>bai,</i>
<i>abi, aiwi,</i>	<i>abhi,</i>	<i>bi,</i>
<i>maidhya,</i>	<i>madhya,</i>	<i>midja,</i>
<i>bandh.</i>	<i>bandh.</i>	<i>bindan.</i>

There are other cases in which the Zend corresponds to the Gothic rather than to the Sanscrit: thus we have

Zend.	Gothic.	Sanscrit.
<i>thri,</i>	<i>thri,</i>	<i>tri,</i>
<i>thwôi,</i>	<i>thus,</i>	<i>tré,</i>
<i>fra,</i>	<i>fra,</i>	<i>pra,</i>
<i>âfrînânu,</i>	<i>frijô,</i>	<i>prî'nâmi,</i>
<i>âfs.</i>	<i>ahva.</i>	<i>ap.</i>

We have before pointed out that in the use of the soft aspirate for *s*, the Zend corresponds with the Greek as contrasted with the Sanscrit and Latin. We now proceed to show that the Greek language, too, in addition to these agreements with the younger class of languages, also presents a peculiarity, in the use of the mutes, which belongs to the third rather than the first class of languages, according to this arrangement. This peculiarity consists in employing an aspirate of the labial or dental order instead of the corresponding medial or tenuis which appears in the Latin, Sanscrit, and Slavonian. In some of these cases the Sanscrit and Greek stand together against

Zend and Latin, so that we must suppose that the effect of time in softening and aspirating has been more felt upon the pliant frames of the former than upon the rough antiquity of the two latter languages. The Sanscrit, in particular, presents many instances of softening and aspiration which are not found in any of the other more ancient languages of this family, as in the substitution of *ch* and *ç* for *k*, of *j* for *g*, &c. The following instances among others will show that the Greek sometimes forfeits its claim to a place among the oldest languages: the Latin or Slavonian *b* is represented by *f*, as in Old High German, in ὄρφανος, Latin *orbus*; ἄλφος, Latin *albus*; ὀμφαλος, Latin *umbilicus*, Lettish, *nabba*; ἀμφώ, ἀμφι, Latin *ambo*, *ambiviam*, Zend *uba*, Gothic *bai*; in these last two cases the Sanscrit *nabhis*, *ubhâu* agree with the Greek: the form ἀμπι is still found in remains of Æolic dialect: *p* is represented by *f* as in Gothic, in κεφαλή Sanscrit *kapâla*, Latin *caput*; in σοφός, Latin *sapiens*; β often becomes φ, and *vice versa* in Greek itself, as κορυφή, κόρυμβος; στρέφω, στρεβλος, &c.; the *d* of the old languages is represented by θ, in θυγάτηρ compared with Sanscrit *duhitar*, Slavonian *dotsher*, Lithuanian *dukter*; in θύρα, Sanscrit *dvâr*, Slavonian *dver*, and so forth. Mr Winning would infer from the appearance of φ, θ, and χ, for *bh*, *dh*, and *gh* or *h*, in Sanscrit, that the Greek language actually presents an aspirate instead of a medial in these cases (*Manual*, p. 42), and fancies that he has discovered in this a very curious interchange between Greek and Gothic, as in the following table (p. 111).

Older Greek.	Proper Gothic.	More recent Greek.	Older Gothic.
ὔδωρ,	<i>vatô</i> ,	θυγάτηρ,	<i>daughtar</i> ,
δέξιος,	<i>taihsvô</i> ,	θύρα,	<i>daur</i> ,
πόδες,	<i>fôtus</i> ,	ὄφρυς,	<i>bra</i> ,
ἄγρος,	<i>akrs</i> ,	νεφέλη,	<i>nibl</i> ,
γόνυ,	<i>knin</i> ,	χήν,	<i>gans</i> ,
μέγας.	<i>mikils</i> .	χθες.	<i>gistræ</i> .

But it must be remarked that in every instance which he has adduced as an exception, the consonant objected to is an aspirate, and that the Greek aspirates are only of the tenuis order, while those in general use in Sanscrit are only of the

medial order, and that, therefore, no argument can be drawn from this discrepancy, which, indeed, admits of an explanation derivable from the vacillations and incompleteness of the aspirates (above, p. 128).

Grimm's law applies only to the interchange of mutes considered according to their distinction as *tenues*, aspirates and medials: when we find an interchange of mutes with others belonging to different organs, as labials with dentals or gutturals, we must not call this an exception to the law as Grimm does (p. 589), for it belongs to a different principle. When *p* is changed to *t* we must consider it as having arisen from a false articulation, which has formed a dental out of the sibilant originally attached to the labial in the particular case. Thus from the root $\sigma\mathbf{F}$ or $\sigma\pi$ are formed, both $\tau\epsilon$ and $\pi\omicron\upsilon$. Similarly when *p* becomes *k* there has been an union of guttural and labial in the original sound, as in $\pi\omicron\iota\omicron\varsigma$, $\kappa\omicron\iota\omicron\varsigma$, compare the Latin *quis*. When *b* becomes *d*, or *d* becomes *g*, the original sound must have originally consisted of both consonants; thus *bis* and $\delta\iota\varsigma$ spring from $\delta\mathbf{F}\iota\varsigma$, like *bellum* from *dvellum*, and $\gamma\eta$ and $\delta\eta$ from $\gamma\delta\eta$, like $\gamma\upsilon\mu\nu\omicron\varsigma$ for $\epsilon\gamma\delta\upsilon\mu\epsilon\nu\omicron\varsigma$. This principle extends to combinations of mutes and liquids as well as to combinations of mutes with mutes; thus $\kappa\epsilon\lambda\alpha\iota\nu\omicron\varsigma$ and $\mu\acute{\epsilon}\lambda\alpha\nu$ spring from $\kappa\mu\acute{\epsilon}\lambda\alpha\nu$, as appears from $\tau\acute{\alpha}\ \kappa\mu\acute{\epsilon}\lambda\epsilon\theta\rho\alpha$ quoted from the glossary of Pamphilus, by Herodian, and from him by the author of the *Etymologicum Magnum* (See Buttman *Lexilog.* II. p. 265). The interchange of aspirates of different organs we have before explained (above, p. 113).

We conclude this chapter with a table of the consonants which correspond in related words of the Sanscrit, Greek, and Latin languages. If the reader desires to see this table immediately confirmed by examples he may consult Pott's *Etymologische Forschungen*, I. p. 84 and following.

	Sanscrit.	.	Greek.	Latin.
Gutturals.	k		κ, π	c (qv).
	ksh		$\xi, \sigma, \kappa, \kappa\rho (\pi)$..	x (c-s) c, s, cr.
	kh		χ	qv, gv.
	g		γ, β	g, b.
	gh		χ	gv.
	n, (like the final n in French)		γ (nasal)	n (adulterinum).

	Sanscrit.	Greek.	Latin.
Palatals.	ch	π, τ	c (qv).
	ch'h	$\sigma\chi, \sigma\kappa$	sc, c.
	j	ζ	g.
	jh	no example	
	n (palatal)	n (guttural)	some nasal.

The cerebrals have few if any representatives among the Greek and Latin letters.

Dentals.	t	τ, σ	t, s.
	th	τ	t.
	d	δ, θ	d, e.
	dh	θ, σ	f, d.
	n	ν, λ	n, l.

Labials.	p	π, ϕ	p, l (q v).
	ph	no example	
	b	β, π	b.
	bh	$\phi (\beta)$	f, b.
	m	$\mu (\beta \text{ bef. liquids})$...	m.

Semivowels	y (palatal)	$\zeta, \iota, \epsilon, \theta$, aspirate ..	j, i.
	r (lingual)	ρ, λ	r, l.
	l (dental)	λ	l.
	v (labial)	$\Phi, \nu, \epsilon, \beta, \phi$, aspirate ..	v.

Sibilants.	ç (s palatal)	κ, σ , aspirate	c (qv) s.
	sh (lingual)	σ , aspirate	s.
	s (s dental)	σ , aspirate	s.
	h (guttural)	χ, γ, κ	h, g, c.

APPENDIX

TO BOOK I. CH. V. p. 118.

EXTRACTS from Bentley's MS. on the Digamma:

Bentley first quotes the following authorities. *Dionys. Halic.* i. 20. *Servius ad Æneados* vi. 359. *Julianus Orat.* xi. p 71; and the following passages from *Grammaticæ Latinæ auctores antiqui. Edidit Putschius.* *Diomed. Gramm.* p. 416. *Priscian* pp. 546, 7. (where, on the words—*inveniuntur etiam pro vōcali correpta hoc digamma illi usi, ut Alcman:* καὶ χεῖμα πῦρ τε δάFιον¹.—F digamma Æolis est, quando in metris pro nihilo accipiebant, ut ἄμρες δ' Fειράναν τὸ δὲ τᾶρ θέτο μῶσα λιγεία².—*Sciendum tamen quod hoc ipsum Æoles quidem ubique loco aspirationis ponebant, effugientes spiritus asperitatem.*³ *Hiatus quoque causa solebant illi interponere F digamma, quod ostendunt etiam poetæ Æolidæ usi:* *Alcman* καὶ χεῖμα πῦρ τε δάFιον et epigrammata quæ egomet legi in tripode vetustissimo Apollinis, qui stat in Xerolopho Byzantii, sic scripta: ΔΕΜΟΠΗΟΦΟΝ⁴, ΛΑΦΟΚΟΦΟΝ. Nos quoque hiatus causa interponimus U loco (τοῦ) digamma F, ut DaUus, ArgUi, PaUo, OUum, OUis, BoUis⁵—he remarks (1) *Si locus sanus est errat Priscianus: nam in iambico dimetro, cujus hæc forma est,*

ἐρῶ τε δῆτα κούκ ἐρῶ—

καὶ μαίνομαι κού μαίνομαι—

Phaselus ille quem vides—

δάFιον facit longam primam syllabam. Sed sæpe apud Homerum correpta syllaba est, ut 'OFίων, 'OFίας, &c. (2) Non pro nihilo hic F accipitur, sed pronunciatur δFειράναν, ut nos possumus DWIRANAN. (3) Non ubique et in omnibus Æoli inserebunt F, sed in certis tantum verbis, ut ex Homero constabit. Et sic Dionysius supra, πολλά non πάντα; et Sergius infra, “in quibusdam dictionibus:” et Terentianus Maurus, “nominum multa.” (4) Sic Codex MS. Cantabrigiæ, non Δημοφών, unde constat tripodem illum vetustiore esse literis Simonideis, η, φ, &c., ut Homerus quoque scribebat MENIN AEIDE THEA ΠΕΛΕΙΑΔΕΟ ΑΚΗΙΑΕΟΣ. (5) Constat ex hoc loco Æoles scripsisse, ΔᾱFος, ἈργεῖFοι, ταFώς, ὠFον, ὀFις, βοFός).—*Valerius Probus* p. 1507. *Sergius Grammat.* p. 1827 (where, on the words—*Æolenses enim Græci qui-*

busdam dictionibus, ut pinguescant, istam digammon apponunt, ut pro ELENA dicunt UELENA. Sed Donatus hic arguitur, quod apud Græcos digammos hanc legem habeat, ut u detracta, nihil absit nomini.—Bentley remarks—*nihil abest nomini in ceteris dialectis Græcorum, at apud Æolenses deperit totum: nam illi pro Foivos nunquam dicebunt oivos, non magis quam Latini pro VINUM, INUM, aut pro VULGUS, ULGUS*). Velius Longus p. 2217. Qui igitur illam literam (H) vindicant, ostendunt ejus eandem vim esse quæ consonantis est; nam et in metro asserit sibi hanc potestatem. Unde et apud Homerum non videntur esse vitiosi versus, qui hac aspiratione supplentur: ἡ ὀλίγον οἱ παῖδα εἰκότα γείνατο Τυδεύς. Et hoc amplius adeo litera est, ut possit videri etiam vicem duarum consonantium implere, ut, ὡς εἰπὼν τόξον μὲν ἀπὸ ἑο θῆκε χαμᾶζε. Et tale quidem exemplum apud nos non animadverti. (On which Bentley observes—*Velius ille hic fallitur, qui id ascribit aspirationi H quod debetur τῷ F; ὀλίγον Hοι pro ὀλίγον Fοι, et ἀπὸ Hεο pro ἀπὸ Fεο*. Sic dedit Homerus: ἡ ὀλίγον Fοι παῖδα Fεοίκοτα γείνατο Τυδεύς. et ὡς Fεἰπὼν τόξον μὲν ἀπὸ Fεο θῆκε χαμᾶζε). Idem pp. 2222, 2235. Scaurus Gramm. p. 2254. Annæus Cornutus p. 2282. Cassiodorus p. 2292. Terentianus Maurus pp. 2387, 2397. Marius Victorinus pp. 2461, 2468. He then proceeds, Claudius Cæsar pro U consonanti scribi jussit F Æolicum, sed inversum ne confunderetur cum F, quod alium tunc sonum habuit. Qualia visuntur in inscriptionibus ævi Claudiani apud Gruterum. Suetonius in Claudio c. 41. Tacitus Annal. xi. 14. Aulus Gellius xiv. 5. (xvi. 17) Donatus ad Andr. Terent. i. 2. Although Bentley was well aware that F has occasionally the power of a double consonant in Homer, it never seems to have struck him that the original sound might have been made up of a guttural and a labial, and therefore he presumes that Hesychius must be wrong when he writes a number of digammated words with a guttural. Hesychius sane, he says, *ridiculus est qui pluribus verbis Æolicis pro F digamma simplicem γ posuit*. His notion was, that the digamma was nothing more nor less than our *w*, as appears from the following note in this MS. U Latinorum olim pronuntiabatur ut W hodie. U consonantem eandem vim et sonum habuisse quam F Æolicum omnes testantur. Dionysius. Οὐελία, Fελία, Uelia, et Julianus ΟΥ. Gruter. p. 1027. OKTAOYIOΣ, Octavius, ΣΕΟΥΑΡΟΣ, Severus, ΟΥΕΙΒΙΟΣ, Vibius, ΟΥΙΒΙΑΝΟΣ, Vibianus, ΟΥΑΛΕΠΙΟΣ, Valerius, ΟΥΕΝΕΠΙΑ, Veneria, et in historicis Græcis nomina infinita. Idem ostendunt nomina quæ nos, hoc est, Germani veteres, ex Latinis sumpsimus. Uinum, hoc est Winum, “wine”; Uallum, Wellum, “a wall”; Uolo, volo, “I will”; Uentus, wentus, “wind”; Uectis, Wectis, “Weight”; Uellus, wellus, “wool”; Uidua, Widua, “widow”.

The greater part of this MS. is filled with a number of lines from Homer, in which digammated words appear. We quote those in which he has introduced any emendations.

Ἄναξ, ἀνάσσω, &c.

Iliad VII. 162. ὦρτο πολὺ πρῶτος μὲν ἄναξ, *lego* πρῶτός γε **Φάναξ**,
vel πρῶτιστα.

IX. 73. πολέεσι δ' ἀνάσσεις, *lego* πόλεσιν δὲ **Φανάσσεις**.

X. 33. Ἀργείων ἥνασσε, *lego* ἐ**Φάνασσε**.

XX. 67. ἔναντα Ποσειδάωνος ἄνακτος, *forte* ἀναστάς.

XXIV. 449. τὴν Μυρμίδονες ποίησαν ἄνακτα, *lego* δείφαντο
Φάνακτα. Cf. 452.

Od. XIV. 438. κύδαινε δὲ θυμὸν ἄνακτος—*versus spurius* (Porson suggests θυμὸν δ' εὐφρηνε **Φάνακτος**).

Ἀνδάνει

Iliad VII. 45. βουλὴν ἣ ρα θεοῖσιν ἐφήνδανε, *lego* θεοῖς ἐπὶ **Φάνδανε**.

Od. XVI. 387. εἰ δ' ὑμεῖς ὅδε μῦθος ἀφανδάνει. (This seems to have puzzled Bentley: we read ἀ**Φανδάνει** with Passow.)

Ἄστυ; inde **Φαστύνοος**, **Φαστύαλος**, **ΦαστυΦάναξ**, **Φαστυβοώτης**.

Iliad III. 140. ἀνδρός τε προτέρωιο καὶ ἄστεος, *lego* προτέρου καὶ
Φάστεος.

XI. 732. ἀμφίσταντο δὴ ἄστυ, *lego* τὸ **Φάστυ**.

XVII. 274. νύκτα μὲν εἰν ἀγορῇ σθένος ἔχομεν, ἄστυ δὲ πύργοι
lego, ἔξετε, **Φάστυ**.

Εἶδω, *video*.

Iliad XXII. 450. δεῦτε, δυνώ μοι ἔπεσθον, ἴδωμ', *lego* ἔπεσθε, **Φίδωμ'**.

Od. VI. 160. οὐ γάρ πω τοιοῦτον ἴδον, *lego* τοίονδε **Φίδον**.

IX. 182. ἔνθαδ' ἐπ' ἐσχατὴν σπέος εἶδομεν, *lego* εὕρομεν.

Quære de ἐσίδων, &c.

Εἴσκω.

Iliad XXI. 332. μάχῃ ἥϊσκομεν εἶναι, *lego* ἐ**Φεῖσκομεν**.

379. οὐ γὰρ ἔοικεν, *lego* οὐδὲ **Φέοικεν** ut v. 435.

Od. IV. 247. φωτὶ κατακρύπτων ἥϊσκε, *lego* ἐ**Φεῖσκε**.

IX. 321. τὸ μὲν ἄρμες εἴσκομεν εἰσορόωντες—ἄρμε *semper casus est accusativi* (why not ἐ**Φίσκομεν**?).

XIX. 283. τόγε κέρδιον εἶσατο θυμῷ (read τόγε **Φεῖσατο** κέρδιον εἶναι).

Inde mendosum est δ' ἥϊκτο quod quater venit pro δὲ Φεῖκτο.

Ἐκάστος.

Iliad XIV. 151. μέγα σθένος ἔμβαλ' ἐκάστῳ, *lego* ὦρσε **Φεκάστῳ**.

Od. IX. 468. ἀνὰ δ' ὄφρυσι νεῦον ἐκάστῳ, *lego* νεῦσα.

- xv. 376. φάσθαι καὶ ἕκαστα πύθεσθαι, *lego* ἅπαντα.
 xvii. 70. τοῖ δ' ἐξερέεινον ἕκαστα, *lego* ἅπαντα.
Cf. Od. xi. 228. ὅπως ἐρέοιμι ἐκάστην *et mox* 233, ἐγὼ δ' ἐρέεινον
 ἀπάσας, *ubi Eustathius* ταύτὸν, ὡς καὶ ἀλλαχοῦ, τὸ
 ἐκ ἁστην καὶ τὰς ἀπάσας.
Iliad xix. 302. Πάτροκλον πρόφασιν, σφῶν δ' αὐτῶν κήδε' ἐκάστη,
lego ἅπασαι.
 332. δείξειας ἕκαστα, *lego* ἅπαντα.
Od. viii. 15. θυμὸν ἐκάστου, *lego* ἀπάντων.
 ix. 127. τελέοιεν ἕκαστα, *lego* ἅπαντα.
 Ἑκας.
Od. vii. 321. μάλα πολλὸν ἐκαστέρω ἐστ' Εὐβοίης (*read* πολλὰ
 Ἑκαστέρω).
 Ἑκήβολος.
Iliad i. 21. ἀζόμενοι Διὸς υἱὸν ἙκήβOLON Ἀπόλλωνα, *lego* υἱὰ Ἑκή-
 βOLON.
 438. ἐκ δ' ἐκατόμβην βῆσαν ἐκήβολω Ἀπόλλωνι, *lego* βῆσε.
 Ἑλίσσω, &c. εἰλέω, εἰλύω.
Iliad xviii. 522. ἐνθ' ἄρα τοίγ' ἴζοντ' εἰλύμενοι, *lego* ἴζον Ἑιλύμενοι.
 xxiii. 320. ἀφράδεως ἐπὶ πολλῶν ἐλίσσεται, *lego* πολλὰ Ἑ-
 λίσσεται.
 Ἑλπομαι.
Od. ii. 91. πάντας μὲν ρ' ἔλπει, *lego* μὲν Ἑέλπει.
 ix. 419. οὕτω γάρ πού μ' ἤλπετ' ἐνὶ φρεσὶ νήπιον εἶναι, *lego* πον
 Ἑέλπετ'.
 Ἑπος, εἶπω, &c.
Od. i. 10. θύγατερ Διὸς εἶπὲ καὶ ἡμῖν (The MSS. omit Διός;
 Bentley offers no emendation, but refers to his note
 on the passage, which we cannot find).
 91. μνηστήρεσσιν ἀπείπεμεν, *lego* μνηστήρεσσ' ἀπὸ Ἑείπεμεν.
 ii. 269. } καὶ μιν φωνήσας ἔπεα, *lego ut sæpius* φωνήσασα Ἑέπεα
 vii. 216. } *per crasin.*
 ii. 331. αὐτ' εἶπεσκε, *lego* αὐ Ἑείπεσκε.
 iii. 264. θέλγεσκ' ἐπέεσσιν, *lego* θέλγεσκε Ἑέπεσσιν.
 427. μένετ' αὐτοῦ ἀόλλεες εἶπατε δ' εἴσω, *lego* ἀολλεῖς Ἑείπατε.
 iv. 637. αὐτίκα δ' ἡγ' ἐπέεσσιν, *lego* ἡγε Ἑέπεσσιν.
 159. τὸ πρῶτον ἐπεσβολίας ἀναφαίνειν, *lego* τὰ πρῶτα Ἑε-
 πεσβολίας *ut sæpe.*
 682. ἢ εἰπέμεναι δρωῆσιν, *lego* ἢ Ἑειπεῖν.
 vii. 275. ὦδ' εἶπησι, *lego* ὥς Ἑείπησι.
 viii. 27. *Dele τ'. 91. lego* τέρποντο Ἑέπεσσιν.
 ix. 224. *lego* λίσσοντο Ἑέπεσσι. 258, 363. *lego* ὥς Ἑεπέεσσιν.

IX. 279. ἀλλά μοι εἴφ' ὅπη ἔσχες, *lego* ἀλλ' ἄγε **Φεῖφ'**.

XI. 296. θέσφατα πάντ' εἰπόντα, *lego* **Φοι Φείποντα**.

560. ἀλλ' ἄγε δεῦρο ἄναξ ἵν' ἔπος καὶ μῦθον ἀκούσης, *lego* ἵνα
 πού καὶ —.

Iliad VII. 349. ὄφρ' εἴπω, *lego* ὡς **Φείπω**.

IX. 61. ἐξείπω, *lego* ἐκ**Φείπω**.

376. *lego* ἐξαπάφοι **Φεπέεσσι**· **Φάλις** δέ **Φοι**· ἀλλὰ **Φέκηλος**.

X. 425. εὐδουσ' ἢ ἀπάνενθε δῖειπέ μοι, *lego* δια**Φείπεμεν**.

XI. 790. *lego* τὰ **Φείποις**.

XV. 398. ὀλοφυρόμενος δ' ἔπος ἠύδα, *lego* δὲ προσῆύδα.

I. 555. δεῖδοικα κατὰ φρένα μή σε παρείπη, *lego* μὴ παρ**Φείπη**.

XIX. 35. *lego* μῆνιν ἀπο**Φείπων** Ἀγαμέμνονι.

Ἔργον.

Iliad XIX. 245. γυναικὸς ἀμύμονος ἔργ' εἰδυίας, *lego* ἀμύμονα **Φέργα**
Φιδυίας.

Od. XIV. 344. εὐδείελου ἔργα, *lego* εὐδείελα **Φέργα**.

XI. 473. ἔτι μεῖζον ἐνὶ φρεσὶ μήσεαι ἔργον, *lego* μήσαο **Φέργον**.

XVII. 313. ἢ μὲν δέμας ἠδὲ καὶ ἔργα, *lego* ἠδέ τε **Φέργα** vel τι.

XXII. 422. τὰς μὲν τ' ἔργα διδάξαμεν ἐργάζεσθαι, *lego* μὲν **Φέργα**
 διδάξαι **Φεργάζεσθαι**.

Ἐρύω.

Od. X. 402, 422. νῆα μὲν ἄρ' ἀμύμονα ἐρύσσατε, *lego* ἀμύμονα
Φερύσσατε.

XVI. 348. ἀλλ' ἄγε νῆα μέλαιναν ἐρύσσαμεν ἥτις ἀρίστη (per-
 haps we may read ἀλλ' ἄγε δὴ καὶ νῆα **Φερύσσα-**
 μεν; at any rate the epithet μέλαιναν seems
 unnecessary).

Ἰάχω, ἰαχή, &c.

Od. II. 428. μέγαλ' ἰαχε, *lego* μέγα **Φίαχε**.

IV. 458. ἡμεῖς δ' αἰψ' ἰάχοντες (omit αἰψ' and read δὲ **Φιάχοντες**).

IX. 395. σμερδάλεον δὲ μεγ' ὥμωξεν περὶ δ' ἰαχε πέτρη (read
 σμερδάλεον δ' ὥμωξε, περὶ δ' ἐπὶ **Φίαχε** πέτρη).

Iliad XIII. 835. Ἀργεῖοι δ' ἐτέρωθεν ἐπίαχον, forte ἐ**Φίαχον** vel -ρωθ'
 ἐπὶ **Φίαχον**.

Ἴσος.

Iliad XXIII. 736. ἀέθλια δ' ἴσ' ἀνέλοντες, *lego* ἀέθλια δὲ **Φῖσ'**.

Οἶδα.

Od. I. 428. κέδν' εἰδυῖα, *lego* κέδνα **Φιδυῖα**.

II. 111. ὑποκρίνονται, ἵνα εἰδῆς, *lego* -νονθ' ἵνα **Φειδῆς**.

IV. 534. οὐκ εἰδότ', *lego* οὐ **Φειδότ'**.

XI. 431. λυγρ' εἰδυῖα, *lego* λυγρὰ **Φιδυῖα**.

XV. 417. καὶ ἄγλαα ἔργ' εἰδυῖα, *lego* ἄγλαα **Φέργα Φιδυῖα**.

Οἶκος.

Od. XIII. 42. ἀμύμονα δ' οἶκοι ἄκοιτιν—*an* ἐνδον?

XIV. 318. }
XVII. 84. } ἦγεν ἐς οἶκον, *lego* δόμονδε.

XIII. 121. ὥπασαν οἰκάδ' ἴοντι, *lego* Φοικάδ' ὥπασσαν ἴοντι.

Iliad I. 19. εὖ δ' οἰκάδ' ἴκεσθαι, *lego* εὖ δ' Ἄργος ἴκεσθαι. And in a note on this passage he says—*Homero semper est Φοῖκος, Φοικάδε. Ergo hic scribendum εὖ δ' Φοικάδ', DWOIKAΔ' ut Anglice DWELL. Priscianus: est quando in metris pro nihilo accipiebant, ut Ἄρμυες δ' Φειράναν.*

Οἶνος.

Iliad VII. 467. παρέστασαν οἶνον ἄγοντες, *lego* πάρεσταν Φοῖνον.

IX. 224. πλησάμενος δ' οἶνοιο δεπας, *lego* πλησάμενος Φοῖνοιο
vel πλήσας δὲ Φοῖνοιο.

Od. XX. 255. ἐφνοχόει δὲ Μελανθεός, *lego* ἐΦοινοχόει.

He also quotes the following exceptions, without proposing any emendations: *Iliad* XVIII. 545. *Od.* II. 46. μελιΦήδεος Φοῖνον. *Od.* XI. 61. ἀθέσφατος Φοῖνος.

Οἶ, *sibi*, ἐ, *se*, ἑο, *sui*.

Iliad V. 338. ὃν οἶ χάριτες κάμον αὐταί. *Versus spurius.*

VI. 90. πέπλον ὃς οἶ δοκέει, *lego* ὃ Φοι.

101. μαίνεται οὐδέ τις οἶ, *lego* οὔτις Φοι.

Ὅς, *suus*, ἦν, ῶ, &c.

Iliad XIII. 561. Ἀσίαδην ὃς οἶ οὔτα, *lego* ὃ Φοι.

XIV. 407. ὅττι δὴ οἶ, *lego*, ut MSS. ὅττι ῥά Φοι.

XIX. 384. πειρήθη δ' ἐὸ αὐτοῦ (read δὲ Φέ' αὐτοῦ).

The following passages are quoted without emendation: *Iliad* XX. 282. ἄχος οἶ χύτο (read ἀχλὺς χύτο). XXIV. 73. ἦ γάρ Φοι. *Od.* IX. 360. αὐτὰρ Φοί αὐτος ἐγώ.

Iliad VI. 474. αὐτὰρ ὃγ' ὃν φίλον νῖον, *lego* αὐτὰρ ὃ Φόν.

XII. 162. ὥμωξέν τε καὶ ὦ πεπλήγετο μηρώ, *lego* ὥμωξεν καὶ
ἐὼ πεπλ. μ.

XI. 330. οὐδὲ ἐοὺς παῖδας ἔασκε, *lego* οὐδὲ Φούς (or rather σφούς).

Iliad XVII. 90, XVIII. 5, XX. 343. εἶπε πρὸς ὃν μεγαλήτορα θυμόν,
an lego ἔφη πρὸς Φόν (or rather σφόν).

Od. IV. 4. θύγατρος ἀμύμονος ῶ ἐνὶ οἴκῳ, *lego* ἀμύμονα Φῶ *ad* γάμον.

Ὡς, *tamquam*.

Iliad III. 196. αὐτὸς δὲ, κτίλος ὥς, *lego* ψιλὸς ἐπιπωλεῖται, and in note on the passage he says—*Quot sunt in hoc versiculo peccata, licet ita citatus a vetere Scholiaste*

Nicandri, et Timon de Cleanthe apud Diogenem Laërtium in Cleanth. τίς δ' οὗτος, κτίλος ὥς, ἐπιπωλεῖται στίχας ἀνδρῶν. *Primum ex Æolismo: oportet enim,—ut semper ὥς “sicut”, “tamquam”—κτίλος* *Ἔως esse, metro repugnante. Quale vero illud “obit ordines virorum tamquam Aries”? Nondum vidi Arietem virorum ordines moderantem. Quæ vero ταυτολογία! “Obit, tamquam ARIES; et comparo eum ARIETI”. Ex ipsa sententia locum vestitus. Versu priore dixerat, “Arma ejus humi posita sunt”: quorsum hoc, nisi ut inferret INERMEM eum obire ordines militum. Lego igitur*

αὐτὰρ ψιλὸς ἐὼν ἐπιπωλεῖται στίχας ἀνδρῶν.

Sic δ, 230, simili orationis filo,

ἵππους μὲν γὰρ ἔασε καὶ ἄρματα ποικίλα χαλκῷ—
αὐτὰρ ὁ πέζος ἐὼν ἐπιπωλεῖτο στίχας ἀνδρῶν.

et ζ, 214,

ἔγχος μὲν κατέπηξεν ἐπὶ χθονὶ πουλυβοτείρῃ,
αὐτὰρ ὁ μειλίχοισι προσηύδα ποιμένα λαῶν.

Ceterum nihil refert quod est αὐτὰρ ψιλὸς non ὁ ψιλός, ob asperitatem duplicis literæ. Sic enim supra γ, 18, αὐτὰρ ὁ δοῦρε δύω: meliores ἐκδόσεις habuerunt sine articulo αὐτὰρ δοῦρε.

It is hoped that these extracts will gratify any curiosity which may still be entertained with regard to the manner in which Bentley proposed to restore the digamma to the text of Homer.

CHAPTER VI.

THE PARTS OF SPEECH.

It has been already mentioned more than once, that there are two divisions of philology, the etymological and the syntactical, and that it is of great importance to keep distinct these two departments. The distribution of words into the parts of speech, as they are called, has been a fruitful source of error to those philologists who have failed to observe that there are two distinct methods according to which this distribution may be effected, the one syntactical, the other etymological; of which the former considers words only according to their distinction as parts of a logical proposition, while the latter analyzes the words themselves, and sets forth the primary elements from which the different kinds of words have sprung. There is a third method based on the former of the two which we have just mentioned, but as its object is merely to facilitate the acquirement of particular languages, and as it differs with those languages, it has never been thought worthy of discussion in formal treatises.

We propose to examine the syntactical arrangement of the parts of speech, before we set forth that etymological distribution, according to which the investigations in the following pages are carried on.

The syntactical division of the parts of speech may be traced to the first beginnings of dialectic or logic, in other words, to Plato. The formation of a system of logic is, in fact, simply a discovery of the principles of syntax, or of the formation of sentences, for, as far as the reasoning faculty is concerned, logic is nothing but the nomenclature and method of the process which every man carries on in his discourse. Logic is conversant with the truth or falsehood of propositions and not with single words (Aristot. *de Interpret.* I. Cicero, *Tuscul. Disput.* I. 7. Aulus Gellius XVI. 8). The first step, therefore, in logical analysis, is the division of a sentence or proposition into its fundamental parts. These fundamental parts we call the subject, copula, and predicate; in other words, the proposition must contain either

a nominative case + verb substantive + some predicate, or, a nominative case + (verb = verb substantive + some predicate). Thus "I run" is equivalent to "I am running." The Greek, however, does not make much use of the copula, the article being considered sufficient to distinguish the subject from the predicate: thus ὁ ἵππος λευκός is fully equivalent to ὁ ἵππος ἐστὶ λευκός. In by far the greater number of cases the Greek verb contains both copula and predicate. Accordingly, it was natural enough that, in analyzing the sentence into its primary elements, Plato would consider these as consisting simply of the noun (ὄνομα) and the verb (ῥήμα), for as Plutarch observes (*Quæstiones Platonicæ*, p. 111. *Wyttenb.*) ῥήματος ὀνόματι συμπλεκόμενου, τὸ γεγόμενον εὐθὺς διάλεκτός ἐστι καὶ λόγος, and Apollonius Dyscolus says (*de Syntaxi*, p. 19 Bekker) that the noun and verb are τὰ ἐμψυχότατα μέρη τοῦ λόγου. Plato brings forward this division most directly in his *Sophistes* (p. 261 E—262 C): ἐστὶ γὰρ ἡμῖν πού τῶν τῇ φωνῇ περὶ τὴν οὐσίαν δηλωμάτων διττὸν γένος—τὸ μὲν ὀνόματα, τὸ δὲ ῥήματα κληθέν—τὸ μὲν ἐπὶ ταῖς πράξεσιν ὃν δῆλωμα ῥημά που λέγομεν—τὸ δὲ γ' ἐπ' αὐτοῖς ἐκεῖνα πράττουσι σημεῖον τῆς φωνῆς ἐπιτεθὲν ὄνομα. οὐκοῦν ἐξ ὀνομάτων μὲν μόνων συνεχῶς λεγομένων οὐκ ἐστὶ ποτὲ λόγος οὐδ' αὖ ῥημάτων χωρὶς ὀνομάτων λεχθέντων—οὐδεμίαν γὰρ—πράξιν οὐδ' ἀπραξίαν οὐδὲ οὐσίαν ὄντος οὐδὲ μὴ ὄντος δηλοῖ τὰ φωνηθέντα, πρὶν ἂν τις τοῖς ὀνόμασι τὰ ῥήματα κεράσῃ· τότε δὲ ἡρμοσέ τε καὶ λόγος ἐγένετο εὐθὺς ἢ πρώτη συμπλοκή, σκέδον τῶν λόγων ὁ πρῶτος εἰ καὶ σμικρότατος. It must be remarked on this passage, that Plato included in the word ῥήμα all that could be called a predicate, as distinguished from the subject, namely the verb and the adjective, for he could not have overlooked the obvious fact, that in the Greek language a verb may alone constitute a whole sentence: thus τρέχει means "he is running." That this opposition is intended is clear from a passage in the *Cratylus*, in which he says (p. 399 B) that we change Διὸ φίλος into Δίφίλος, ἵνα ἀντὶ ῥήματος ὄνομα ἡμῖν γένηται: for Δίφίλος is properly a subject, and Διὸ φίλος is calculated to be a predicate. Some logicians according to Plutarch (*Quæst. Platon.* p. 108) substituted κατηγορήμα—"predicable"—for ῥήμα in this division of the λόγος, or logical proposition, into its distinct parts. Did Plato make this division, he asks, ὅτι πρῶτον λόγον οἱ παλαιοί,

τὴν τότε καλουμένην πρότασιν, νῦν δὲ ἄξιωμα, προσηγόρευον, ὃ πρῶτον λέγοντες ἀληθεύουσιν ἢ ψεύδονται; τοῦτο δὲ ἐξ ὀνόματος καὶ ῥήματος συνέστηκεν, ὧν τὸ μὲν πτώσιν οἱ διαλεκτικοὶ τὸ δὲ κατηγόρημα καλοῦσιν.

Aristotle, following in the steps of his master, adopted the same division of the parts of a sentence. He says (*de Interpretatione* c. 1—5): πρῶτον δεῖ θέσθαι τί ὄνομα καὶ τί ῥῆμα, ἔπειτα τί ἐστὶν ἀπόφασις καὶ κατάφασις καὶ ἀπόφανσις καὶ λόγος—τὰ μὲν οὖν ὀνόματα αὐτὰ καὶ τὰ ῥήματα ἔοικε τῷ ἄνευ συνθέσεως καὶ διαιρέσεως νοήματι οἷον τὸ ἄνθρωπος ἢ τὸ λευκόν.—ὄνομα μὲν οὖν ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἄνευ χρόνου ἧς μηδὲν μέρος ἐστὶ σημαντικὸν κεχωρισμένον—ῥῆμα δὲ ἐστὶ τὸ προσημαῖνον χρόνον, οὗ μέρος οὐδὲν σημαίνει χωρίς, καὶ ἐστὶν ἀεὶ τῶν καθ' ἑτέρου λεγομένων σημείον—λόγος δὲ ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἧς τῶν μερῶν τι σημαντικὸν ἐστὶ κεχωρισμένον ὡς φάσις, ἀλλ' οὐχ ὡς κατάφασις ἢ ἀπόφασις—ἐστὶ δὲ εἰς πρῶτος λόγος ἀποφαντικὸς κατάφασις, εἴτα ἀπόφασις· οἱ δὲ ἄλλοι πάντες συνδέσμων εἰς. Here again it is clear that λόγος is the logical proposition, ὄνομα the subject, and ῥῆμα the predicate—"the sign of things predicated of another thing;"—and that the ῥῆμα includes adjectives as well as verbs, appears, as well from this place in which λευκόν is given as an instance of a ῥῆμα, as from another passage in the same treatise (c. 14): μετατιθέμενα τὰ ὀνόματα καὶ τὰ ῥήματα ταῦτόν σημαίνει, οἷον ἐστὶ λευκὸς ἄνθρωπος, ἐστὶν ἄνθρωπος λευκός. The ῥῆμα is a predicate broken off from an actual sentence, and it is only in this opposition that it gets its distinctive name: otherwise it is merely an ὄνομα as Aristotle says (*de Interpret.* c. 3): αὐτὰ μὲν οὖν καθ' ἑαυτὰ λεγόμενα τὰ ῥήματα ὀνόματά ἐστι. The philosopher has explained his meaning with regard to the predicate more fully in his treatise on the categories: as this little work has never been properly understood, it will be as well to point out its object. It commences by distinguishing *homonyms*, *synonyms*, and *paronyms*. Two things are synonymous when they agree not only in name but also in nature, as when we say that a man and a horse are both animals; but they are only homonymous when they agree in name only, as one might say that a horse and the picture of a horse were both animals, and that the man who painted the latter was an animal-painter, although the real defi-

nition of the horse and its picture would not coincide. Words are paronymous when they differ only in inflexion: thus "courageous" is a paronym of "courage." Aristotle proceeds: "some words are spoken in connexion (*κατὰ συμπλοκήν*); others separately. Examples of the former case are—*ἄνθρωπος τρέχει, ἄνθρωπος νικᾷ*: of the latter, *ἄνθρωπος, βούς, τρέχει, νικᾷ*." After distinguishing between those things that are said of, and those things that exist in, a subject (*τὸ ὑπόκειμενον*), and particularly asserting that individuals (*τὰ ἅτομα*) cannot be said of a subject, he (c. 4) enumerates ten classes of those words which are spoken separately; they are thus described—*τῶν κατὰ μηδεμίαν συμπλοκήν λεγομένων ἕκαστον ἥτοι οὐσίαν σημαίνει ἢ πόσον ἢ ποιὸν ἢ πρὸς τι ἢ ποτὲ ἢ κείσθαι ἢ ἔχειν ἢ ποιεῖν ἢ πάσχειν. ἔστι δὲ οὐσία μὲν ὡς τύπῳ εἰπεῖν οἶον ἄνθρωπος, ἵππος· πόσον δὲ οἶον δίπηχυ, τρίπηχυ· ποιὸν δὲ οἶον λευκόν, γραμματικόν· πρὸς τι δὲ οἶον διπλάσιον, ἡμισυ, μείζον· ποῦ δὲ οἶον ἐν Λυκείῳ, ἐν ἀγορᾷ· ποτὲ δὲ οἶον ἐχθὲς, πέρυσιν· κείσθαι δὲ οἶον ἀνάκειται, κάθεται· ἔχειν δὲ οἶον ὑποδέδεται, ὥπλισται· ποιεῖν δὲ οἶον τέμνει, καίει· πάσχειν δὲ οἶον τέμνεται καίεται. ἕκαστον δὲ τῶν εἰρημένων αὐτὸ μὲν καθ' αὐτὸ ἐν οὐδεμιᾷ κατάφασιν λέγεται ἢ ἀποφάσει, τῇ δὲ πρὸς ἄλληλα τούτων συμπλοκῇ κατάφασιν ἢ ἀπόφασιν γίγνεται.* Now it is sufficiently obvious from these last words, that the ten sorts of words thus described do not mean predicates, but simply the different parts of a sentence whether subject or predicate, for it is by the joining of these with one another, that the sentence, whether affirmative or negative, is to be formed. Aristotle institutes a more particular examination of the first four, which have descended to us from the scholastic philosophy under the names, substance (or quiddity), quantity, quality, and relation: the other six he has hardly illustrated at all. If we take a general view of these categories, according to the instances which Aristotle has given, we shall see that this is merely a grammatical or rather syntactical arrangement of certain parts of speech: the first category includes nouns substantive, the three next, different sorts of adjectives, the fifth and sixth, adverbs of place and time, and the last four verbs, considered as active (9th), passive (10th), intransitive (7th), and in the perfect tense, or as representing the effect of something which has been done or has occurred (8th); the Greek perfect cannot be consi-

dered as merely past time, and that is included in the fifth category. This is of course a very rude approximation to a scientific division, the number ten being in all probability borrowed from a similar classification among the Pythagoreans. The object of the philosopher in enumerating these classes is shown by his subsequent explanation: these ten sorts of words do not in themselves constitute either an ὄνομα or ῥῆμα as distinguished from one another, but only when they can be considered as general terms; for instance, it is only as a synonym that substance can become a predicate; in other words, the πρῶται οὐσίαι or individuals cannot be predicated, but only the δεύτεραι οὐσίαι, or *genus* and *species*: thus he says, τὰ εἶδη καὶ τὰ γένη μόνα δηλοῖ τὴν πρώτην οὐσίαν τῶν κατηγορουμένων, and ὑπάρχει ταῖς οὐσίαις καὶ ταῖς διαφοραῖς τὸ πάντα συνωνύμως ἀπ' αὐτῶν λέγεσθαι· πᾶσαι γὰρ αἱ ἀπ' αὐτῶν κατηγορίαι ἥτοι κατὰ τῶν ἀτόμων κατηγοροῦνται ἢ κατὰ τῶν εἰδῶν. ἀπὸ μὲν γὰρ τῆς πρώτης οὐσίας οὐδεμία ἐστὶ κατηγορία· κατ' οὐδενὸς γὰρ ὑποκειμένου λέγεται· τῶν δὲ δευτέρων οὐσιῶν τὸ μὲν εἶδος κατὰ τοῦ ἀτόμου κατηγορεῖται, τὸ δὲ γένος καὶ κατὰ τοῦ εἶδους καὶ κατὰ τοῦ ἀτόμου, and similarly of the differences (διαφοραί), ὥστε πάντα τὰ ἀπὸ τῶν οὐσιῶν καὶ τὰ ἀπὸ τῶν διαφορῶν συνωνύμως λέγεται (*Categ.* 5). Hence, κατηγορία is elsewhere used by Aristotle to signify *genus*, even as distinguished from *species*: thus he says (*de partibus Animalium* I. c. 1. p. 639. l. 29), ἕτερα δὲ ἴσως ἐστὶν οἷς συμβαίνει τὴν μὲν κατηγορίαν ἔχειν τὴν αὐτὴν, διαφέρειν δὲ τῇ κατ' εἶδος διαφορᾷ, οἷον ἡ τῶν ζώων πορεία· οὐ γὰρ φαίνεται μία τῷ εἶδει· διαφέρει γὰρ πτήσις καὶ νεῦσις καὶ βάδισις καὶ ἔρψις. And the *categoremata* or predicables, as supplementary to and descriptive of the categories or predicaments, are the universals: ὅρος, γένος, εἶδος, διαφορά, ἴδιον καὶ συμβεβηκός (*Topica* I. c. 6). So then Aristotle's treatise on the categories is a first attempt to consider which of the words that appear in a simple sentence (λόγος) may form the predicate or ῥῆμα of that sentence, and neither he nor Plato meant to say that ὄνομα and ῥῆμα were parts of speech in the etymological sense, nor had they any other object than to lay the foundations of a system of logic, which of course depends on the syntax of individual propositions. We must, therefore, be careful to distinguish from this logical division of the simple sentence, the distribution of words into the parts of speech, also commenced by Aristotle and carried out by the

Stoics and later grammarians. This distinction is pointed out by Plato and Aristotle themselves in their discrimination of λόγος and λέξις. The former is a logical sentence, the ὄνομα and ῥῆμα,—κατὰ συμπλοκήν; the latter is the whole outward form of language, whether expressed by articulate sounds or in writing; or, to use the words of Ammonius Hermias (on Aristotle *de Interpret.* p. 99 Brandis), λόγου μὲν οὖν ταῦτα (the parts of speech as they are called) οὐ μέρη, λέξεως δὲ μέρη ἧς καὶ ὁ λόγος αὐτὸς μέρος. καθάπερ ἐν τοῖς περὶ Ποιητικῆς (c. 20) εἴρηται. διαφέρει δὲ ὁ λόγος τῆς λέξεως ὅτι ὁ μὲν ἐστὶ πλήρωμα προηγουμένως τῶν σημαινουσῶν τὰ πράγματα φωνῶν, ἡ δὲ πασῶν ἀπλῶς τῶν παραλαμβανομένων εἰς τὴν διαλεκτικὴν. ἔχεις δὲ τοῦ λόγου τὴν πρὸς τὴν λέξιν διαφορὰν καὶ ὑπο Πλάτωνος ἐν τῷ τρίτῳ τῆς Πολιτείας παραδεδομένην (p. 392 c) ἐν οἷς φησί “τὰ μὲν δὴ λόγων περὶ ἐχέτω τέλος, τὸ δὲ λέξεως, ὡς ἐγώμαι, μετὰ τοῦτο σκεπτέον, καὶ ἡμῖν ἄτε λεκτέον καὶ ὡς λεκτέον παντελῶς ἐσκέψεται.” δι’ ὧν δῆλός ἐστι λόγον μὲν τὴν διάνοιαν καλῶν, λέξιν δὲ τὴν ἀπαγγελίαν. This also appears from the words of Plato (*Politicus*, p. 277 c) γραφῆς δὲ καὶ ζυμπάσης χειρουργίας λέξει καὶ λόγῳ δηλοῦν πᾶν ζῶον μᾶλλον πρέπει τοῖς δυναμένοις ἐπεσθαι. In the passage of the Poetics, referred to by Ammonius, Aristotle divides λέξις into the following parts; the letter (στοιχείον), the syllable (συλλαβή), the conjunction (σύνδεσμος), the noun (ὄνομα), the verb (ῥῆμα), the article (ἄρθρον), the inflexion (πτῶσις), and the sentence (λόγος). From the explanations which follow, it appears that noun and verb are here used in the modern signification, that λόγος does not here mean a logical sentence only (οὐ γὰρ ἅπας λόγος ἐκ ῥημάτων σύγκειται), but any set of words, a definition for instance (οἶον ὁ τοῦ ἀνθρώπου ὁρισμός), and that πτῶσις does not mean merely the case of a noun, but any inflexion of a noun or verb. For instance, the distinctions of words noticed by Protagoras were only inflexions or πτώσεις¹. It is clear that the only parts of speech, according to the meaning which we attach to the term, here mentioned by the philosopher are the noun, article, conjunction, and verb, and he specially mentions

1. He is said to have been the first to distinguish the different moods of verbs (Aristot. *Poet.* c. 21. Quintil. III. 4. § 10. Diogen. *Laert.* IX. 53. Suidas *Πρωτα-*

γόρας) and the genders (Aristot. *Rhet.* III. 5. § 5.), for which last he is ridiculed by Aristophanes, *Nub.* 656 foll.

the three former in the *Rhetorica ad Alexandrum* (c. 26). Now it is stated by Dionysius of Halicarnassus (*de Compositione Verborum*, c. 2. *de Demosthenis Præstantia*, p. 1101 Reiske) and Quintilian (I. 4. § 17), that Theodectes and Aristotle acknowledged only three parts of speech, the verb, the noun, and the conjunction; and that the article was subsequently added by the Stoics. It appears then that Quintilian, and Dionysius, whom he copies in this place, paid attention only to the passage of the *de Interpretatione* quoted above, in which it is said that the logical sentence consists merely of ὄνομα and ῥῆμα, and that the different propositions are united by means of the conjunction (σύνδεσμος), so that they also have taken merely the logical division. The separation of the article is also due entirely to its logical importance in the Greek language; every Greek word, however general, may be rendered by the article so individual and definite, as to be adapted to form the subject of a proposition: in fact the whole distinction between the subject and predicate in many cases is, that the former has, and the latter wants the article. But, although Aristotle felt this importance of the article, he does not appear to have said any where that it was a part of the λόγος, and therefore Dionysius and Quintilian are right in attributing its addition to the Stoics, if, as we suppose, they were speaking of the logical division.

We have stated thus minutely the origin of the syntactical parts of speech, because it has not been pointed out before, so far as we know, and in order that our readers may more easily detect the fallacy, by which Horne Tooke has, perhaps designedly, based his whole system of etymology on this syntactical distribution of language. The resolution of the sentence into subject and predicate, or, what generally comes to the same thing in Greek, into the noun and the verb, was undoubtedly of great importance at the time when it was first effected: it was the beginning of a syntactical analysis of language, when etymology, or the doctrine of the matter and form of language, was not and could not be in existence. But to make this arrangement the basis of etymology, to derive the elements of the word from the elements of the sentence, and thus to seek the part in the whole, is a mode of proceeding which can only lead to error and confusion. What then shall we say of a modern philologist, who not only reproduces this old logical division of the

parts of speech, applying, however, to the words ὄνομα and ῥήμα the limited signification of noun and verb, which they had only as a part of λέξις in the method of Aristotle, but has even made this division the basis of a system of etymology, virtually supposing that language was formed according to that system of logic, which only the mighty genius of Plato and the unfailing subtlety of Aristotle succeeded in extracting from the clearest and most syntactical language ever spoken by man? And this is just what Horne Tooke has done. His system of ultra-nominalism is based on a supposition, which his contemporaries incautiously allowed, that the two primary sorts of words, from which all others are derived, were the nouns and the verbs. "In English and in all Languages" says he, (Vol. I. p. 45) "there are only *two* sorts of words which are *necessary* for the communication of our thoughts; and they are (1) Noun and (2) Verb. In the strict sense of the term, no doubt both the necessary words and the abbreviations are all of them parts of speech; because they are all useful in language, and each has a different manner of signification. But I think it of great consequence both to knowledge and to languages, to keep the words employed for the different purposes of speech as distinct as possible. And therefore I am inclined to allow that rank only to the necessary words: and to include all the others (which are not *necessary* to speech, but merely substitutes of the first sort) under the title of *abbreviations*." Proceeding from this assumption, he has not hesitated to derive all the indeclinable words, whether conjunctions, prepositions, or adverbs, from nouns or verbs, and thus of course has fallen into all kinds of inconsistencies¹. But enough of this celebrated piece of sophistry, which, in spite of some very happy explanations of English words, and some very ingenious argumentations, written in a lively and attractive style, should never be opened by any one who has not sufficient philological knowledge to guard him from the errors into which it will inevitably lead the ignorant or unwary.

The logical or syntactical distribution of words was, as we have already stated, made the basis of that division of the

1. It is right to mention, that most writers on philology before comparative grammar was brought to its present state of perfection fell into the same error of

taking a logical view of etymology, but we select Horne Tooke as an object of animadversion, because his book is designedly wrong, and actually pernicious.

parts of speech which has been adopted for practical convenience in learning particular languages, according to which it varies. In the case of the Greek language the usual arrangement is as follows :

1. Noun, { Substantive,
 { Adjective,
2. Pronoun, including the Article,
3. Verb, with which is connected,
4. Participle.

These are all capable of inflexion.

5. Adverb,
6. Preposition,
7. Conjunction,
8. Interjection.

These are not inflected and are generally called particles.

The old grammarians adopted this arrangement, with the exception, that they classed the interjection with the adverb and made the article a distinct part of speech (*Dionys. Thr. Bekk. Anecd.* p. 634). For the purpose of learning a language, the syntax of which is logical and for the most part well understood, this arrangement is highly convenient, and from its constant adoption the ear has become so familiar with it, that its nomenclature can hardly be banished even from etymology, with which it has no concern. We, therefore, retain the names of these eight parts of speech, though, to avoid confusion, we render them subordinate to the real etymological division of words, which we have already mentioned, and which we now more formally set forth.

In the Indo-Germanic languages, all words may be reduced to two primary elements; the pronouns, or those words which indicate space or position; and the words containing roots. The former are words, declinable or indeclinable as the case may be, without any admixture with the other element. The latter require the addition of at least one pronominal suffix to make them words. It is for this reason that we term the pronouns the organizing, constituent, or formative element of the language, and the roots the material element. By pronominal additions of a perfectly analogous nature, the same root becomes either a noun or a verb. We cannot, therefore, consider the noun and verb as, etymologically, different parts of speech, but, on account of their prominent importance in the syntactical scheme, we have in the following pages classed them under separate heads,

which arrangement is further justified by the fact, that in the case of the verb the idea of space has developed itself into the idea of time. That the formative element of language is prior to the material, appears from what we have just mentioned,—that the pronoun is a word without extrinsic addition; but the noun or verb are such only by the addition of pronominal elements. It also appears from psychological considerations. Every thing is conceived as happening in space or time, the idea of space being however antecedent to, and the parent of, that of time. The first conception about any thing is that it has a position, that it is somewhere without us, and, as it is our conceptions that we express in words, the first words must be those which indicate position, that is, pronouns. The next conception with regard to the particular object, is of some particular quality with which sensation has invested it, and this quality of course gives it its name according to a sort of *primâ facie* classification. But still it is *somewhere*, and therefore the pronoun is tacked on to the end of it, in order to constitute it a word: the same would be the case, though in a more obvious manner, when the thing conceived was not a quality but an action.

That in the Greek language in particular, all words may be resolved into and deduced from these elements, will be abundantly shown in the following pages. As we use the word pronoun or pronominal in a sense somewhat wider than that in which it is generally used, it will be as well to give comparative tables of the etymological and ordinary arrangements of the parts of speech.

Etymological.		Syntactical.	
Formative element or Pronoun,		{ Preposition, Conjunction, Numeral, }	
Material element combined with Pronoun,	Noun,	{ Adjective, Substantive,	
	Verb,	{ Participle, Verb.	

The interjection is either an unmeaning cry or the vocative case of a noun: the adverbs are generally pronominal words, but some of them are merely cases of nouns. The numerals are adjectives in syntax, though etymologically pronouns.

NEW GRAMMAR

BOOK II.

BOOK II.

PRONOMINAL WORDS.

THE CRATILUS

BOOK II

THE TERMINAL AND OTHER PROLOGUES

BOOK II

PRONOMINAL WORDS

THE
NEW CRATYLUS.

BOOK II.

CHAPTER I.

THE PERSONAL AND OTHER PRONOUNS.

IN the Indo-Germanic languages, considered in their most ancient form, we can always resolve the pronouns into the shortest possible words, a monosyllable for instance, or even a single vowel (in the latter case it is of course a derivative form, for, as we have shown before, no single vowel can exist in the first instance without at least an initial breathing) : in fact, the primitive pronouns must have been very simple words, for the first and easiest articulations would naturally be adopted to express the primary intuition of space. These little vocables denote only the immediate relations of locality, and to designate all the subordinate varieties of position and direction, it is the custom, especially in the Greek language, to join together the different pronouns, or different modifications of the same pronominal stem, till at last we arrive at long words, like *ὅσ-τις-δὴ-πο-τε*, every syllable of which is a distinct pronoun.

The first principles of this ultimate analysis of all pronominal words were discovered by that admirable philologist, Bopp. In his essay *über den Einfluss der Pronomina auf die Wortbildung*, he remarks (p. 13), “from the dissection of the pronouns and the prepositions connected with them, we get the following monosyllabic stems, partly consisting of a mere vowel, which either occur in Sanscrit only, or are found in the connected European languages with more or less exact correspondence in form : *a, i, u, é ; ka, ki, ku ; na, ni, nu ; ma, mi (-μι), mu ; ya, yu ;*

va, vi; ta, da, sa. The compound pronouns—meaning thereby not derivatives like *tâ-vat* ‘so much,’ but primitives, which the grammarians consider as simple, but which we have endeavoured to reduce into their real elements—show as their first member, in *Sanscrit*, a stem consisting of a single vowel; they are the following, *a-va, i-va, ê-va, a-na, ê-na, a-da, i-da, ê-ta, ê-ka, ê-sha.*” But, although this analysis was pointed out six years ago, no one has thoroughly examined, compared, and classified these monosyllabic stems and others which Bopp has omitted to mention; we shall therefore endeavour to show which of these pronominal words have a common origin, and thus to arrange them according to their natural coherency.

It is reasonable to suppose, that the primitive pronouns would be designations of *here* and *there*, of the subject and object as contrasted and opposed to one another. As soon as language became a medium of communication between two speaking persons (and it is not important to consider it before it arrives at this point), a threefold distinction would at once arise between the *here* or subject, the *there* or object, and the person spoken to or considered as a subject in himself, though an object in regard to the speaker. We find traces in the Indo-Germanic languages of an application of the three first consonant-sounds belonging to this family of languages, namely the three *tenues*, to denote these three positions of *here, near to the here, and there*, or first, second, and third personal pronouns, as they are generally called. These *tenues*, articulated with the usual short vowel, are the three pronominal elements *pa* (found in *πα-πά*, &c.), *ka* (found in *κέ*, &c.), and *ta* (*τό*, &c.). The two former are, however, more usually represented by the cognate sounds *ma* or *va*, and *Fa*, whether the digamma represents *sa, ha, ka* or *ga*. By a similar change of articulation the third element appears as *na*. If now we take the elements enumerated by Bopp, we shall find, that, according to the principles stated in a former chapter, *ma, mi, mu, va, vi*, belong to the first of them; *ka, ki, ku, ya, yu, i, u*, to the second; and *ta, nu, ni, na*, to the third of the original pronouns. The second also appears under the forms *ga, ha*, immediately derived from either *ka* or *Fa*. The syllables *da* and *sa*, for reasons which will be stated in a following chapter, generally belong to the second pronoun, though the former would seem to be only a slight variation of the element *ta*, and the pronoun *sa*

is actually used for the third pronoun when that pronoun denotes a person or subject. From *va*, as a variation of *ma* the first pronominal element, we must carefully distinguish the same syllable when it appears as a mutilation of *Fa*, the second element, though it must be confessed, that, from the use of this element *va* to form the second personal pronoun from the third, great and unavoidable confusion must be produced in the mind of the inexperienced etymologist. And here we will anticipate what will be stated hereafter more at length. According to the principle mentioned above, any one of these simple elements may be compounded with any one of the others so as to form new modifications of the idea of position. There is, as we shall see, a pronominal element *-la* or *-ra* indicating motion, or conveying the idea of "beyond." When this is added to the first pronominal element, it combines the idea of closeness with that of removal, as in *πα-ρά*, *πε-ρί*, which express motion from or to the side of, and motion close round an object. When with the second, it expresses the third position as opposed to the second, and *κα-ρα*, as we shall see in the following chapter, is equivalent to *ta*, or even to *ta-ra*, which expresses the same third position in a state of further removal. On the contrary, by combining the third pronominal element with the first, whether under the form of *ma* or of *va*, it obtains a signification of nearness approaching to, or even coinciding with that of the second element: thus *ta-ma*, the suffix of the superlative, expresses the approximation of the end of a series to the speaker, and *ta-va* is the common form of the second personal pronoun. We shall see in the next chapter that the three first numerals are the primary pronouns under the forms, *ma*, *ta-va*, and *ta-ra* or *ka-ra*. The elements *va* and *na* are both used to designate the first person, though always in the dual or plural number. They are also used to convey the strongest idea of the demonstrative pronoun, that of distance or separation, and ultimately of negation. In this sense *va* agrees with *ma* and with the elements *a* and *é = ai*, the former of which is a mutilation of *va*, and the latter a slight modification of it according to the rule for the semi-vowel's change of place; another such modification is *au* or *av*. This coincidence in meaning between the first pronominal element under the forms, *a*, *ai*, *au*, *va*, and *ma*, with the third personal pronoun *na* appears at first sight most unaccountable. It is, however,

explicable psychologically, from the fact that the ideas of self, unity, separation, distance, solitude, and negation all spring from a common source. The element *na* is a strong expression of the *there*, or distance; *ma*, &c. of the *here* or self as a separate individuality. Hence, the strongest expression of self in these languages is, in Sanscrit and Latin, *a-ha-m*, *e-go-met*, "that which is here," but in Greek *ἐ-γώ-υη*, "that which is by itself or separate." All our misconceptions about pronouns and pronominal words arise from a sort of word-worship produced by the impressions of common language. The philological student cannot be too early or too strongly impressed with the fact, that all pronouns must have been originally demonstrative, or words indicative of particular positions. In their original application there could be no distinction of personal pronouns and relatives, from the demonstratives. Indeed, it will be seen in the following pages that the relatives, reflexives, and the nominative of the ordinary demonstrative are all derivable from the second personal pronoun, or the index of nearness in space.

We have thus stated before-hand the results of our analysis of the pronominal words, in order that the student may be provided with a general map of the country which he is about to survey, and, knowing what to look for, may not be confused by the multiplicity of details; we now proceed to examine each of the pronouns more minutely, taking them in the order in which they appear in the common grammars, and beginning in each case with the existing classical form, and so ascending to its primary state.

The objective cases of pronouns, as well as of nouns, are always older than the subjective. This appears from the fact that there are many nouns which have no subjective case (for instance, all neuter nouns), but no one so far as we know without an objective case. It might also be inferred, from a priori considerations, that it must be so. All things are to us parts of an external world, and must needs be spoken of as such long before the mind of man can invest the *not-me* with the powers of agency and will, which we experience in ourselves. We feel that even the spot on which we stand, and which is for the moment identified with our description, for we are *the here*, is nevertheless a *not-me*, and is spoken of as something without, as an object, and therefore must continue to be called one till language begins to assume a logical structure.

The common forms of the objective or accusative cases of the personal pronouns, in Sanscrit, Greek, Latin, and Gothic are as follows.

	Sanscrit.	Greek.	Latin.	Gothic.
1st person.	<i>mām, mā.</i>	<i>με.</i>	<i>mē.</i>	<i>mik.</i>
2nd	<i>tvām, tvā.</i>	<i>σε.</i>	<i>tē.</i>	<i>thuk.</i>
3rd	<i>tam.</i>	<i>τόν.</i>	<i>tum.</i>	<i>thana.</i>

The Cretans appear to have said *τFε* instead of *σε*, which is probably a softened form of it, as may be inferred from the following glosses of Hesychius. *τέορ. σου. Κρητες.—τρέ. σέ. Κρητες.* Here we should read *τεοF* for *τέου* and *τFέ* for *τρέ*, for immediately under the former gloss we have *τεούς. σούς.* and the resemblance between P and F might easily cause the mistake. Besides, a labial is manifestly included in the nominative *τύ.* We think a similar labial has dropt out in the Latin *tē*, nominative *tū.* If so, the common pronoun of the second person in the Sanscrit, Latin, and Greek languages is made up of the third element *ta* and first element under the form *va*, which we have before pointed out as one of the methods adopted for the expression of the idea of comparative nearness. The Latin *tūm* occurs only in composition or as a particle.

The *ε* which, under certain circumstances, is found at the beginning of the Greek *με* and the other oblique cases of the first personal pronoun is, as Bopp justly remarks (*Vergl. Gramm.* p. 468), to be referred to that prevailing tendency in Greek to prefix a vowel to words beginning with a consonant, as appears e. g. in *ὄ-νομα, ὄ-δοός, ὄ-φρύς, ἐ-λαχός*, compared with *nāma, danta-s, bhrû-s, laghu-s.* We find it also in *ἐκεῖνος* compared with *κεῖνος*. These forms, then, of the objective case of the personal pronouns are identical in the four languages compared above: this identity they also maintain as the personal endings of the oldest class of verbs in Sanscrit, Greek, and Latin, but then, as we shall show hereafter, the vowel is generally subjected to certain changes which we shall discuss in the proper place.

In the nominative also, the resemblances of the first two, though not so striking, are sufficiently certain.

	Sanscrit.	Greek.	Latin.	Gothic.
1st person.	<i>aham.</i>	<i>ἐγών.</i>	<i>ego.</i>	<i>ik.</i>
2nd	<i>tvam.</i>	<i>τούν.</i>	<i>tu.</i>	<i>thu.</i>

The remarkable fact about these first persons is, that though *aham*, ἐγών, &c., bear no immediate resemblance whatever to *mām*, με, &c., the nominative of the second pronoun manifestly contains the same element as its objective case. This, however, is by no means inexplicable. Even after the invention of nominative cases the person spoken to would still continue to be an object, and therefore the nominative and objective cases of that pronoun would contain the same elements; but when the speaker could detach his notion of himself from the idea of space, from the *here*, which before constituted his definition, and consider himself as the *I*, the real subject, he would adopt some word more emphatic than the mere monosyllable με to express himself by, and this word was *aham* in Sanscrit, and *ego* in Latin and Greek, by a common transition from the *h* to the *g* (Pott's *Etym. Forsch.* I. p. 144). The word τάν (and in the vocative ὦ τάν "O you") is an old form of τύ (Buttmann, *Ausführl. Sprachl.* § 57, *Anm.* I.), and is strikingly like the Sanscrit *tvam*.

If we compare *aha-m*, *tva-m*, with *a-ya-m*, "this man", *i-ya-m*, "this woman", *sva-ya-m*, "oneself", *va-ya-m*, "we", *yú-ya-m*, "you", *ma-h-ya-m*, "to me", &c., we must conclude that the termination is simply *m*. The Greek ἐγών was written ἔγων by the Æolians, ἐγώνγα and ἐγώνη by the Dorians (Apollonius Dyscolus, *de Pronom.* p. 64 B., Bekker). Of the Boeotian ἰών Apollonius writes as follows. Βοιωτοὶ Ἰών, ὡς μὲν Τρύφων φήσιν, ὑφέσει εὐλόγῳ τοῦ γ, ἵνα καὶ τὰ τῆς μεταθέσεως τοῦ εἰς ἰ γένηται, ἐπεὶ φωνήεντος ἐπιφερομένου τὸ τοιοῦτον παρακολουθεῖ. ἀλλὰ μὴν καὶ ἐδασύνθη, ἐπεὶ δασύνεται τὰ φωνήεντα ἐν ταῖς ἀντωνυμίαις, ὅτε πρὸ φωνήεντων τίθενται, ἐός, ἐοῦ, ἐαυτῶ, ἐαυτόν, ἐοι. ὡς δὲ ἔνιοι, ὧν καὶ ὁ Ἀβρων, θέμα ἐστίν ὃ συζύγως οἱ αὐτοὶ φασὶ τῇ μὲν ἐγών τὴν ἰών, εἶγε τὸ παρὰ Δωριεῦσιν εἰς ἰ μεταβάλλεται, τῇ δὲ ἔγωνγα τὴν ἰωνγα. Κόριννα.

μέμφομαι δὲ καὶ λιγουράν Μυρτίδ' ἰωνγα
ὅτι βανὰ¹ φούσ'² ἔβα Πινδαρίοιο ποτ' ἔριν.

1. This word, which is the Boeotian form for γυνή, deserves some remark. The following are the notices of the grammarians respecting it. *Herodian* (περὶ μον. λεξ. p. 18, l. 25), τὸ γὰρ παρὰ Κορίννη βάνα οὐ κοινὸν οὐδὲ εἰς νῆ λῆγον, ἀλλὰ ἴδιον θέμα Βοιωτῶν τασσόμενον ἀντὶ τοῦ

γυνή. *Hesych.* Βαννα. γυνή ὑπὸ Βοιωτῶν. Now the Dorians said γάνα instead of γυνή (*Gregor. Corinth. de Dialecto Dor.* § CLIII.). It is, therefore, obvious that the original form must have commenced with a compound of the guttural and labial, otherwise the two forms are inexplicable.

Καὶ ἔτι

ἰωνεὶ ἥδ' ἡρώων ἀρετὰς χειρῶν

(read, partly with Sturz, ἰωνγα οὐδ' ἡρώων ἀρετὰς χείρω ἄδω). In like manner for σὺ or τύ, we find τύνη, and the Bœotian forms τοῦ, τοῦν, τοῦγα (Apollon. *de Pronom.* p. 69 c); also in the oblique cases the Æolians wrote ἔμοι, the Bœotians ἐμού, the Dorians ἐμίν and ἐμινγα, and the Tarentines ἐμίνη and τίνη (Apollon. *de Pronom.* p. 104 c and 105 c). In Hesychius too we have ἐμήνη (read ἐμεύνη), ἐμοῦ, and ἐξεχέμεναι (read with Hemsterhius ἐξεχ' ἐμεύνη), χωρὶς ἐμοῦ, Λάκωνες. When we remember that the Dorians wrote δύων for δύο (Hesychius), that ἐγώ appears as *egō* in Latin, that the third person dual was sometimes -τον, at others -την or -των; that we have *mē, tē, sē*, in Latin, and *mām, mā, tvām, tvā* in Sanscrit, by the side of μέ, σέ, έ; also μήν, μή, δήν, δή, as well as μέν, μά, दें, दे, and in the case endings -δην, as well as -δα, -δον, we shall not feel much difficulty from the variation in quantity which takes place in these pronouns, and perhaps be disposed to recognize, without any hesitation on that account, the identity of *āhā-m* and ἐγώ-ν, ἐγώ-νη. The termination of the former is undoubtedly the element of the first personal pronoun, which appears at greater length in the Latin *ego-met*; the final -ν, -νη of the latter is a variation of the element *ta*, which we shall frequently have occasion to speak of. The bulk of the pronoun *aha-m* is a compound of the pronominal elements *a, ha*, the former being of demonstrative, the latter of relative import, and the whole signifying "that which", or conveying, with the affix, the meaning "that which is here", while the gloss in Hesychius (ἐγών, αὐτὸς ἐγώ) seems exactly to express the meaning of ἐγώ-νη, i. e. "that which is by itself". If we may be allowed to state now what we shall prove in the course of the following chapters, the relative element, which here in

The old word was perhaps γβάνα or Fάνα. This digamma initial is split up in the usual way in the different Indo-Germanic languages. The whole letter is preserved in the old English *quean*, the labial only in the Bœotic βάνα, Sanscrit *vanita*, Erse *bean* or *vean*, Welsh *benw*, the guttural only in the Sanscrit *jani*, Erse *gean*, Russian *jena*. In the common Greek γυνή the

labial is vocalized into ν, as is the case with κύων, κυνός, Sanscrit *çvan*, &c.

2. It may be doubted whether this is the Bœotian form for φῦσα (ου being regularly substituted for ν, whether long or short, in that dialect) or the participle of the verb φέω, supposed to be the old form of φύω (see J. H. Voss on Virgil, *Eclog.* I. 49).

Sanskrit and generally in Greek appears under the form *ha*, *ô-s*, also assumes (1) the form γa , $\gamma \epsilon$ in Greek, under which it corresponds in meaning to the Sanskrit particle *ha*; (2) the form *quē*, *quī* in Latin, under which it corresponds in meaning to the Greek $\gamma \epsilon$, Sanskrit *ha* (*quī-dem* = $\gamma \epsilon - \delta \eta \nu$), (3) the form *ka*, *κα*, in Sanskrit and Greek. We trust to be able to show in the following chapter that the pronominal element *mā* is also one of the representatives of the first numeral in Greek. There is another expression for unity in Sanskrit *ê-kas*, in Greek *ê-κας*, in Latin *æquus* (*sēcus*), in Hebrew *'ekhad*, the first syllable of which is the strong form of the simplest demonstrative root *a*, which under the forms *ai*, *au*, *va*, corresponds in value if not in origin to the element of the first personal pronoun. These expressions for unity are, in our opinion, identical with the Greek *ê-γώ*, the Latin *e-go*, and the bulk of the Sanskrit *a-ha-m*. In the Boeotian *iō-ν* the suppressed guttural is represented by the aspirate, on a principle before explained. With the final letter suppressed *a-ha* is in Sanskrit "a particle and interjection implying; (1) commendation: (2) rejecting, sending; (3) deviation from custom (improperly): (4) certainty, ascertainment." (Wilson's *Sanscr. Dict.* s. v.), and it is interesting to know, that the Latin language has two interjections, *ehem* and *eho*, corresponding to *aham* and *ego* respectively, which convey a meaning very nearly akin to what we conceive to have been the original force of the first personal pronoun: compare such passages as *ehem, Demea, haud aspexeram te: eho puer, curre ad Bacchidem*. These are not the only instances of the use of the particle *hā* in Latin. It appears to have been the regular suffix of the objective cases of the first pronoun in old Latin. Quintilian says (*Inst. Orat.* I. 5, § 21), *Inde durat ad nos usque VEHEMENTER, et COMPREHENDERE, et MIHI: et MEHE quoque pro ME apud antiquos, tragædiarum præcipue scriptores, in veteribus libris invenimus*. It is not improbable too that the same termination was employed to form the genitive and dative cases of the first personal pronoun in the oldest Greek. This dative appears generally under the form *μοι* or *ἐμοί*. Bentley, however, perceived that the metre in Homer occasionally required *μεοῦ*, *μεοί*, instead of *ἐμοῦ*, *ἐμοί*, and *μεός* instead of *ἐμός* in the possessive, after the analogy of the Latin *mei*, *mihi*, and *meus*. We give the passages in which he has noticed this, from a MS. in the Library of Trinity College.

- Iliad* IX. 426. ἦν νῦν ἐφράσαντο, μεοῦ ἀπομνήσαντος.
Odyss. X. 425. αὐτοὶ δ' ὀτρύνεσθε μεοὶ ἅμα πάντες ἔπεσθαι.
 XX. 364. Εὐρύμαχ', οὔτι σ' ἄνωγα μεοὶ πομπῆας
 ὀπάζειν.

In these three passages the editions have ἐμοί. In the following, they have different cases of the possessive ἐμός.

- Iliad* IV. 412. τέττα, σιωπῇ ἦσο, μεῶ δ' ἐπιπείθεο μύθῳ.
 IX. 57. ἦ μὴν καὶ νέος ἐσσί, μεὸς δέ κε καὶ παῖς εἴης.
 XIX. 194. δῶρα μεῆς παρὰ νηὸς ἐνεγκέμεν.
 XX. 20. ἔγνως, Ἐννοσίγαιε, μεῆν ἐν στήθεσι βουλήν.
 XXIII. 278. πατρὶ μεῶ Πηλῆϊ.
Odyss. IX. 459. καδδὲ μεὸν κῆρ
 λωφῆσειε κακῶν.
 X. 178, and 428. XII. 222. οἱ δ' ὦκα μεοῖς ἐπέεσσι
 πίθοντο.
 XII. 258. οἴκτιστον δὴ κείνο μεοῖς Φίδον ὀφθαλμοῖσι.
 397. and XIV. 249. ἔζημαρ μὲν ἔπειτα μεοὶ ἐρίηρες
 ἑταῖροι.
 XIII. 305. Φοίκαδ' ὅπασσαν ἴοντι, μεῇ βουλῇ τε νόῳ τε.
 XXIV. 327. εἰ μὲν δὴ Ὀδυσσεύς γε, μεὸς παῖς, ἐνθάδ'
 ἱκάνεις.

With regard to the use of μεοὶ for ἐμοί, we think the ο in both forms is a substitute for the lost digamma or aspirate, which is otherwise represented in the common suffix -φι, and that μεοί = με-φι = μέφι is fully equivalent to *mi-hi*. The same stem is represented by the *k*, or *ch* appended to the Gothic *ik*, *mik*, *thuk*, New German *ich*, *mich*, *dich*. It may be objected to this explanation of the identity *ha*, *γα*, &c., and that, if so, this element is repeated in such combinations as ἔγωγε, ἔγωνγα, ἰωνγα, &c., but it will be remembered that nothing is more common than such repetitions of the same root in pronominal compounds, and especially when it appears under slightly modified forms. When it is placed after the termination -ν- as in ἔγωνγα, the word is a compound of two compound pronouns, into each of which similar pronominal elements enter: for νγα or ναγα is a compound analogous to *me-he*, *mih*.

As the three primitive personal pronouns are expressions for the relations of place, synonymous, in fact, with the Latin *hic*, *iste*, *ille*, and the Italian *questo*, *cotesto*, *quello*, we ought to find in the Greek and cognate languages traces of the use of

these forms as demonstrative pronouns; and we do so. With regard to the first; in Sanscrit we have *i-ma* "this-here," from which Bopp derives the Latin words *im-ago* and *im-itor* (*Demonstrativstämme*, p. 21). The Greek demonstrative *μίν*, and, as we shall hereafter show, the preposition *με-τά*, the particles *μέν*, *μά*, and the verbs *μάω*, *μένω*, *maneo*, &c., all contain this element. It appears as a suffix to the second and third personal pronouns: in Sanscrit, *tvā-m*, *aya-m*, as well as *aha-m*; in Latin, *tu-met*, *vos-met*, *se-met*, *ipse-met*, as well as *ego-met*, *nos-met*. The second element, under the form *ta-va*, is used as a demonstrative in the numerals. Of its use under some form derived from *Fa* we shall speak by and by.

The common dual and plural of *aham* and *tvam* are in the nominative and accusative as follows: nom. dual. *āvām*, *yuvām*; accus. dual. *āvām* or *nau*, *yuvām* or *vām*; nom. plur. *vayam*, *yūyam*; accus. plur. *asmān* or *nas*, *yushmān* or *vas*. It will, of course, be understood by every one, that the plural of the first personal pronoun, of which the dual is only a modification, could not be formed from the singular as the plural of any noun might be. The plural of this pronoun must signify one of two things, either a collection of persons united in the idea of *here* and, as such, separated for the moment from the rest of the world, or, as between two speakers, the idea of *I + you*. On analyzing these Sanscrit forms we shall find that one of these meanings is always implied. The plural *va-ya-m* is a combination of two modified forms of the first and second pronouns respectively, to which the common element of the first is added to imply more strongly that the notion of *here* is intended. Therefore, *va-ya-m* means "I + you here." Similarly, the plural *yū-ya-m* is a repetition of the second element, with the same suffix. Of the first syllable we will speak presently. We have already mentioned the employment of the pronoun expressing distance or separation to denote the first person, and explained how, in fact, there is none of that absolute difference between pronouns of different persons which habit leads us to imagine. It is true that there was and is a distinction in meaning between the stems *ma* and *ta*, as signifying the opposition of *here* to *there*. But they are, both of them, essentially demonstrative, and there is no reason whatever why modifications, in fact, stronger forms of them, should not be used to convey the notions of unity,

distinctness, and separation, which run into one another. At any rate, there is no doubt of the fact, that these stems are so used, and we shall see abundant proof of it when we come to a discussion of the negative particles. We have an instance of this phenomenon in the pronouns before us. The dual *â-vâ-m* is evidently composed of the pronominal stem *â*, in our opinion a degenerated form of *va* as derived from the first pronoun *ma*, and *vâ* an entirely different element, which is unquestionably a corruption of the second pronoun under the form *sva*, and appears as *vâm* and *vas* in the accusative dual and plural. To the whole is appended the suffix *m*, so that this word signifies "I + you here," like *va-ya-m*. By the side of this we find the accusative forms *nau* in the dual and *nas* in the plural, which are obviously nothing but the dual and plural of the third pronominal element, under the form *na*. In order to analyze the plural accusatives *asmân*, *yushmân*, we must take the Vêda-forms of the nominative plural, *asmé* and *yushmé*. The former is written *amha* in Pali and Prâcrit. It is obvious that the termination of these forms is *sma-i*; the aspiration of *s* in the second word is caused by the *u* which precedes, a phenomenon common enough in Sanscrit: compare the datives *amushmai*, from *amu*, and *tasmai* from *tâ*. This suffix *sma*, compounded of the stems *sa-ma* and also appearing as the preposition *sam* (σύν), is used to form some of the oblique cases of all pronouns of the third person; indeed, *asmât*, the ablative singular of a demonstrative, differs only in the quantity of the last syllable from *asmat* the ablative plural of the first pronoun: *sa-ma* signifies "all taken together," "whole," "entire," "complete," and in this sense of completeness, it is used to give verbs in the present tense a past signification: thus we have *hanti sma Râvanam Râmah*; "Râma killed" (instead of "kills") "Râvana" (Wilson Dict.). The initial vowel *a* is the first pronominal element in the last state of mutilation, and thus the compound *asmé* = *a-sa-ma-i* (the final vowel being the mark of plurality in the case of pronouns ending in *a*, Bopp. *Vergl. Gramm.* p. 262) signifies "the here taken altogether," with a note of plurality appended. The first syllable of *yushmé* = *yu-sa-ma-i*, is obviously the same stem that appears in *yûyam*.

We may now compare these Sanscrit forms with those which occur in some of the other languages of the Indo-Germanic family.

The Latin plurals *nos* and *vos* agree exactly with the accusatives plural *nas* and *vas*, and the Greek duals *νῶϊ*, *σφῶϊ* correspond pretty well to the duals *nau* and *vām*, the latter of which, as we have said, has lost its initial sibilant or guttural. In the Greek *νῶϊ*, the most predominant idea must have been "separation," "unity," as appears from the adverb *νός-φι* "by himself¹," *νόσ-τος* "a return" (literally, as we shall see below, "a coming from a distance"), and in the pronoun *νιν* which always stands alone, though we often have *μιν αὐτόν*. The German languages have very short forms for the plural of these pronouns; generally, in fact, modifications of the simple root. Thus the Gothic has *weis*, *yas*, Lithuanian *mės*, *yūs*, English *we*, *you*. The Zend has also the short forms *vaēm*, *yūs*. The Greek forms *ἡμεῖς* (Æolic *ἄμμες*), *ὕμεῖς* (Æolic *ὕμμες*) agree with the Vêda words *asmê*, *yushmê*. The Æolic *ἄμμες*, *ὕμμες* (by the Æolian *ψίλωσις* for *ὕμμες*) are assimilations for *ἄσμες*, *ὕσμες*, as *ἐμμί* is for *ἐσμί*, Sanscrit *asmi* (Bopp, *Vergl. Gramm.* p. 473). With regard to the first syllable of the latter, the following remarks may suffice. The Greek aspirate often stands for the Sanscrit *y*: thus *yas*, *yaj*, *yakrīt* (*jecur*) correspond to *ός*, *ἄζω*, *ἥπαρ*. We have no hesitation, then, in comparing the Homeric word *ὕσμίνη*, "battle," with its Sanscrit synonym *yudhma*: Döderlein's suggestion, that it comes from *ὑπομεῖναι* (*Lat. Synon. u. Etym.* III. p. 304), is not deserving of any consideration: the derivation of an old substantive from the infinitive aorist of a compound word reminds one of the perverted ingenuity of Schrevelius. When we recollect phrases like *conserere pugnam*, and compare *yudhma* with *yugma* (*Lat. jugum*) "a pair," "a brace," we shall be disposed to seek for a connexion of meaning. Now *jugum*, another form of *djugum*, as *Janus* is of *Djanus*, *Juturna* of *Djuturna*, &c., contains the element of the second numeral, as does also the word *duellum*, "battle." In the next chapter we shall show that the second numeral is identical with the second person singular. As then the second numeral is contained in the first syllable of *yugma*, *yudhma*, *ὕσμίνη*, so is the second pronoun in *yushme*, *ὕμεῖς*. The suffix *-sma* is assimilated into *-mma* in the singular dative of the Gothic pronoun, just as it is in *ἄμμες*, *ὕμμες*. Thus the

1. The grammarians, absurdly enough, consider this word as an abbreviation of *νόστο-φι* (Hermann. *Opuscul.* I. p. 222).

Gothic *thamma*, *hvamma* and *imma* correspond to the Sanscrit *tasmai*, *kasmāi* and *asmāi* (Bopp, "Annals of Orient. Lit." p. 16. and Grimm, *Deutsche Gramm.* I. p. 826). It appears as *smu* in old Prussian: thus *antar-smu*, *ka-smu* correspond to the Sanscrit *antara-smāi*, *ka-smāi* (Bopp, *Abh. Ak. Berl.* 1824 p. 143).

The nominative masculine and feminine of the third personal pronoun are as follows:

	Sanscrit.	Zend.	Greek.	Gothic.
Masc.	<i>sa</i> , <i>sak</i> , <i>sô</i>	<i>hō</i>	<i>ô</i>	<i>sa</i>
Femin.	<i>sâ</i>	<i>hâ</i>	<i>â</i> or <i>ḥ</i>	<i>sô</i> .

The Greek or Zend forms are of course corruptions of the fuller forms preserved in Sanscrit and Gothic. The nearest Latin forms corresponding to these are the compounds *hi-c*, *si-c*, the latter of which is used only as a conjunction. It will be observed that all these forms belong to a different element from the neuter nominative, *tat*, *tat*, *τό*, *thata*, *tum* or *is-tud*. In fact, as will hereafter be shown, it is only a masculine or feminine noun that can have a nominative case properly so called. The reason for the adoption of a form manifestly connected with the second pronominal element as a nominative of the third personal pronoun, will be obvious on the slightest consideration. The person spoken to, or designated as near, is invested with a subjectivity and personality which is denied to the object spoken of, or designated as *there*. Now, whatever is spoken of as in the nominative case, is considered as subjective in itself, though not a part of ourselves, and therefore can only be designated by a pronoun which expresses the greatest degree of nearness to the *here*. We shall return to this subject when we come to the case-endings.

There are two stronger forms of the demonstrative or pronoun of the third person, both compounds with the simple *ô*, *ḥ*, *τό*: namely, *ô-δε*, *ḥ-δε*, *τό-δε*, and *οὐ-τος*, *αὐ-τη*, *τοῦ-το*. The former we shall consider in the next chapter. The latter we will now examine in connexion with *αὐ-τός*, another pronoun of the third person. The first part of *αὐ-τός* occurs as a separate particle in Greek, expressing removal, distance, negation, &c. It occurs also in *αὐ-θι*, *αὐ-τάρ*, and, in a weaker form, in *ἀ-τάρ*; it is the same mutilation of the first pronoun which we have had in *asmé*. In this more complete state, or,

perhaps, as a reduplication, it appears in the Sanscrit *ava*, and the Slavonic *ovo* (Bopp *Vergl. Gramm.* pp. 400, 544). We cannot agree with Bopp (*Vergl. Gramm.* p. 491) in considering οὐτος, αὐ-τη, τοῦ-το as a combination of αὐτός, αὐτή, αὐτό, with the primitive pronoun ὁ, ἡ, το. It would be better to adopt the suggestion of Max Schmidt, whom he quotes, that it is merely a compound of the simple pronoun with -τος its objective form, and that the first syllable is lengthened euphonically; though it is not right to compare this word with τοιοῦτος, &c. as Schmidt does, for these words are really compounds of τοῖος, &c. with the pronoun αὐτός, as appears from the feminine forms τοιαύτη, &c. In the same way αὐτός appears compounded with itself in αὐταυτος (Sophron. *apud Apollon. de Pronom.* p. 339 B). Our objection to Bopp's etymology is simply this, that when ὁ, &c. are combined with αὐτός, &c. the crasis is αὐτός, αὐτή, ταὐτό, not οὐτος, αὐτη, τοῦτο.

The nominative case ὁ=σο also appears under the subsidiary form ἱ, in which the effect of the digamma has been to convert the vowel into *i* (compare φύω, υἱός, ὑπερφύης, with *fio, filius, ὑπερφίαλος*), and this vowel being, as we have before seen, itself a representative of the guttural, the aspiration has been omitted when less emphasis was intended. Both forms appear in Latin, the stronger as *hi-c, si-c*, the weaker as *i-s, i-terum, i-tem*, &c. The latter appears as *i-ma, i-taras* in Sanscrit. Most scholars, as well as the old grammarians, consider ἱ to be the nominative case of οὐ, οἱ, ἐ; thus Dionysius the Thracian (*Bekk. Anecd.* p. 640), πρόσωπα προτοτύπων μὲν ἐγώ—σύ—ἱ—ἀριθμοὶ δὲ πρωτοτύπων ἐνικὸς μὲν ἐγώ—σύ—ἱ, δοικὸς δὲ νῶϊ—σφῶϊ, πληθυντικὸς δὲ ἡμεῖς—ὕμεῖς—σφεῖς—πτῶσεις δὲ πρωτοτύπων μὲν ὀρθῆς ἐγώ—σύ—ἱ, γενικῆς δὲ ἐμοῦ—σοῦ—οῦ, δοτικῆς δὲ ἐμοί—σοί—οἱ, αἰτιατικῆς δὲ ἐμέ—σέ—ἐ. The Scholiast on this passage says (p. 916, Bekker), τοῦ τρίτου προσώπου ἐστὶ τὸ ἱ, καὶ σημαίνει τὸ οὐτος ἢ ἐκεῖνος, καθ' ἑαυτὸ μὲν κειμένον εὐρέθη οὐδαμῶς, ἔοικε δὲ ἀπὸ τῆς τῶν Ἀττικῶν χρήσεως εἰρῆσθαι παρὰ τούτῳ τῷ τεχνογράφῳ. ἐκείνοσί γὰρ λέγουσι καὶ οὐτοσί. That this Scholiast is mistaken, appears from the words of Apollonius Dyscolus (*de Pronomine* p. 69 c), ἱ ταύτην οἱ μὲν φασὶ παράλογον, ὅτι οὐ διὰ τοῦ ὕ ἀποβολῇ γὰρ τοῦ σ̄ κατὰ το τρίτον ἀποτελεῖσθαι σοῦ, οῦ, σός, ὅς. He proceeds (p. 70 B), ἀξιοπιστότερος δὲ ὁ Σοφοκλῆς μάρτυς χρησάμενος ἐν Οἰνομάῳ· εἰ μὲν ὥσεί θάσ-

σωνα εἰδὼς εἰ τέκοι παῖδα. The Venetian Scholiast, on the *Iliad* xxii. 410, reads this fragment of Sophocles somewhat differently, thus; ἡ μὲν ὥσει θάσσο· ἡ δὲ ὥσι τέξου παῖδα. From a comparison of these two readings, William Dindorf has emended this corrupt line as follows; ἡ μὲν ὥς ἰ θάσσον', ἡ δ' ὥς ἰ τέκοι παῖδα, adding, "it is said of two women, each of whom was boasting of her son's fleetness. Why they did so, is clear from the well known story about Œnomaus." Bekker thinks (*Comment. Crit.* p. 337), that ἰ might properly be substituted for ἐ in the following passage of Plato (*Sympos.* p. 175 c), μετὰ ταῦτα ἔφη σφᾶς μὲν δειπνεῖν, τὸν δὲ Σωκράτη οὐκ εἰσιέναι. τὸν οὖν Ἀγάθωνα πολλάκις κελεύειν μεταπέμψασθαι τὸν Σωκράτη, ἐ δὲ οὐκ ἔαν, and appears also to suggest the insertion of this obsolete nominative in a passage at the end of the same dialogue (p. 223 d), τὸν οὖν Σωκράτη—ἀναστάντα ἀπιέναι, καὶ αὐτὸς, ὥσπερ εἰώθει ἔπεσθαι, where almost all the MSS. omit αὐτός (Bekker's *Comment. Crit.* p. 362). With regard to the former passage it may be observed, that, according to the rules of Syntax, ἰ would be better grammar than ἐ; that, in the passages quoted by Heindorf, on the *Euthydemus* § 72, and on the *Sophistes* § 42, the verb is always οἶμαι or ἡγοῦμαι, and that οἶμαί με by no means justifies φημί με, as Stallbaum (*ad loc.*) seems to imagine. In the latter passage the ἰ might so easily have been absorbed by the last letter of the preceding καὶ that we cannot doubt it would be a better reading than αὐτός, which is disallowed by the MSS. The two following are important passages relative to this pronoun. Apollonius Dyscolus (*de Pronom.* p. 10 B), ἀντωνυμίαι ἀναφορικαὶ ἢ τε ἰ, οὗ, οἶ, ἐ. Priscian. XIII. 2 § 7. *Queritur etiam illud, cur, quum apud Græcos tertia persona pronominum primitivorum et in singulari numero nominativum habeat F_i, et in plurali σφεῖς, apud Latinos sui et nominativo deficit, et pluralia separatim non habuit.* § 8. *Apud Græcos nominativus supradicti pronominis, id est F_i, rarus est in usu.* These authorities, taken together, are sufficient to establish the fact, that there was originally a nominative to the reflexive pronoun οὗ, οἶ, ἐ, and that this nominative was ἰ. We need not wonder that this ἰ should be of rare occurrence. There is very little need for the nominative of the reflexive pronoun, which is, in most cases, used objectively. The nominative of the Latin reflexive pronoun *sui, sibi, se*, never occurs, nor has that

pronoun any plural number. Now what is the reflexive pronoun? Nothing more, we believe, than a form of the second pronoun, pointing at once to some person or thing close at hand, and it is always used in connected speech to refer to the person last spoken of, when that person is considered in any way as a subject, especially in relating the words of that person. The idiom of the Latin language admits of such phrases as *dixit se venturum*, but the Greek, which is much more accurate in its syntax, always requires that if the subject is expressed in the nominative in one member of the sentence the same case must be continued in the dependent member; accordingly, the pronoun is either suppressed, as is generally the case, for example *Μοιροκλῆς οὐκ ἔφη πονηρότερος εἶναι*, or, if emphasis requires it, as in the line of Sophocles quoted above, or distinctness in a complicated sentence renders it necessary, as in the two passages from Plato's *Symposium*, a nominative case of the reflexive pronoun would of course be used if there were one, and we have clear testimony that there was one. The very fact that there was no plural of the Latin reflexive pronoun shows, as all undeclined parts of speech always show, that the word itself, and the peculiar use of it, belong to the oldest state of the language. As, therefore, it is manifest *a priori* that the reflexive is nothing more in its nature than a demonstrative pronoun indicating nearness of position, we must seek for its equivalent among the oldest forms of the demonstrative pronouns. We have irresistible evidence that there was a pronoun *ἵ* as well as a pronoun *ἶ*. The Scholiast on Dionysius (quoted above) says as much, though he confused it with the reflexive pronoun mentioned by the author on whom he was annotating, and whom, like all other Scholiasts, he made a point of misunderstanding. Its existence is further proved by Hesychius' Glosses *ἵν. αὐτήν, αὐτόν. Κύπριοι.—εἶν. ἐκεῖνος* (leg. ἐκεῖνον); by what Lascaris says (*de pronomine* III. p. 344): *τοῦ τρίτου προσώπου ἡ ὀνομαστικὴ κατὰ παλαίους ἵ* (leg. *ἶ*) *καὶ ὅς*, and by the remark of Draco (p. 106): *ἡ ἵ ἀντωνυμία ἡ σημαίνουσα τρίτον πρόσωπον βραχὺ ἔχει τὸ ι*; for if *ἵ* was short, it could not have been the same with *ἶ* which we know from the passage of Sophocles, and from the terminations *ἐκεῖνος-ῑ, οὗτος-ῑ*, &c. to have been a long syllable. Moreover, the conjunction *εἰ* "by this that" = "on this condition"—is, as we shall show, the

dative of *ί*, just as the Latin *si* is the dative of *sis*; the pronoun also evidently enters into *ί-γνητες*, the Rhodian word for *αὐθυγενεῖς*, i. e. “born in that place,” into *ί-σος*, *ί-ος*, *ί-ωρος*, and *ί-διος*, and we have seen its appearance in Latin and Sanscrit. The evidence indeed for this pronoun is so clear that Hermann and Böckh have not hesitated to introduce *ίν* as the dative, into the text of Pindar (*Pyth.* IV. 36. *Nem.* I. 66). It is quite clear, then, that the Greeks had two pronouns, the stronger aspirated form *ί* being used to express the reflexive relation, i. e. relation to something near and immediate; the *ι*, a synonym for *αὐτός*, to denote something in which the idea of nearness was not so directly implied; and, therefore, to return to the common terminology, *ί* is a complete, and *ι* a shortened or mutilated form of the second personal pronoun, which appearing in the ultimate analysis as the stem **Fa**. The same was the case in Latin. The common pronoun *i-s* expresses the ordinary demonstrative relation, the equally common pronoun *hi-c* signifies “that which is near”: the termination *c* is a mutilation of the ordinary affix *ce*, so that we should write *hun-ce*, not *hunc-ce*. This termination is by no means confined to the singular, as some scholars have imagined. In good writers we have *hi-c* for *hi* (Varro. VI. 73) and *hæ-c* for *hæ* (Plautus *Aulularia* III. 5, 59. Terence *Eunuch.* III. 5, 34. *Phormio* V. 8, 23. Varro. V. 75, &c). Now this pronoun *hi-c* stands for the Latin *si-c* by the common change from the sibilant to the aspirate, and to the same root belong *se-d*, *si*, the forms in Ennius *sa-m*, *sap-sa*, *su-m*, *so-s*, and, we have no hesitation in saying, also the reflexive *su-i*, *si-bi*, *se*. It is highly interesting to know that in the Rig-vêda we possess the weaker forms *i-m* (also an old Latin form) and *i-d*, and also the stronger form *si-m*.

This supposition that the reflexive pronoun is identical with that of the second person and merely indicates nearness of place, is fully borne out by the use of *έ* in Homer, where it occurs as a demonstrative pronoun implying nearness, and is used in the singular and plural of all genders: thus *Iliad* I. 236.

ναὶ μὰ τόδε σκήπτρον τὸ μὲν οὔποτε φύλλα καὶ ὄζους
 φύσει, ἐπειδὴ πρῶτα τομὴν ἐν ὄρεσσι λέλοιπεν,
 οὐδ' ἀναθηλήσει περὶ γὰρ ῥά έ (nam circa hoc) χαλκὸς ἔλεψε
 φύλλα τε καὶ φλοιόν.

And in the Hymn to Venus, v. 268,

τῇσι δ' ἅμ' ἣ ἐλάται, ἥ δ' ὀρνέες ὑψικάρῃνοι
 γεινομένησιν ἔφυσαν ἐπὶ χθονὶ βωτιανείρῃ
 καλαί, τηλεθάουσai, ἐν οὔρεσιν ὑψηλοῖσιν
 ἐστᾶσ' ἠλίβατοι, τεμένη δέ ἐ κικλήσκουσιν
 ἀθανάτων (*hæc autem vocant*).

With regard to the use of ἐ both as singular and plural, it is to be observed, that while we have ἅμμε, ὕμμε, constantly in the plural, we have ἐμέ, σέ, invariably as singular forms. We may remark, too, that the endings of the datives plural ἅμμιν, ὕμμιν, of the datives singular ἐμίν, τίν, γίν = Fίν (= σοί, *Hesychius*), and of the accusatives μιν, νιν, ἴν, are the same: σφιν is both singular and plural; for its plural use see Matthiæ's Note on Herodotus, p. 285, and for its use in the singular, see Hom. *Hymn Pan.* 19. *Æschylus, Persæ*, 761. *Sophocles, Œd. Col.* 1487, and *Reisig, Enarr.* p. CLXXXI. *Buttmann, Lexilogus*, Vol. I. p. 60. It is very easy to conceive why there should be identities in the case of pronouns, where there are such marked distinctions in the other parts of speech; the fact is certain, and it is an additional proof, if proof were needed, of the exceeding antiquity of these little elementary words. If the pronouns were, as will be shown hereafter, used for the purpose of distinguishing the cases and numbers of nouns, it is obvious, that in the original pronouns there could be no consistent distinctions of that kind.

It will be observed by every reader of the Greek writers, that the ordinary dual and plural forms of the reflexive pronoun were identical with the second personal pronoun, in form, and with both first and second personal pronouns in signification. Thus we have σφωέ, "they two," σφῶϊ, "ye two;" μετὰ σφίσιν = μεθ' ὑμῖν (*Hom. Iliad*, x. 398), σφέτερος, (1) "yours," *Hesiod*, ἐ. κ. ἦ. 2. and elsewhere (2) "mine," *Theocr. Id.* xxv. 163: this is universal: (3) "thine," *Theocr. Id.* xxii. 67. (4) "ours," *Xen. Cyr.* vi. 1. § 10. In the same way we find words, into which the element ἐ enters, used to express the first and second persons; thus *Moschus, Idyll.* iv. 77, μηδέν σε χειριότερον φρεσὶν ἦσιν στέργειν ("my own heart"); *Hom. Iliad*, xix. 174. σὺ δὲ φρεσὶν ἦσιν ἰανθῆς ("your own heart"); *Odyss.* i. 402, κτήματα δ' αὐτὸς ἔχοις καὶ δώμασιν οἰσὶν ἀνάσσοις, ("your

own house"). The same is the case with the cognate Sanscrit word *svayam*, and its possessive adjective *svas*. Now it may be asked with regard to this fact in Greek and Sanscrit, why it happens that such an extension of meaning is given to the reciprocal in those languages, while in Latin the same pronoun is never used, except in the third person. The fact is, that the Romans made but a sparing use of their pronominal words in comparison with the Greeks, as indeed appears from their disuse of that particular sort of pronoun called the article, and from the infinitely greater number of pronominal particles in Greek and Sanscrit. As a natural consequence, we find in Latin, a greater restriction upon the free use of these particles and pronouns, and a greater uniformity in the employment of them, for, not possessing a great variety of pronouns, they frequently used as distinct words, what were only different articulations of the same form. Thus, while they used *suus* (in Ennius *sus*) = *svus*, (Greek $\sigma\phi\acute{o}s$, Sanscrit *svas*), as the possessive of *se*, they turned the by-form $\sigma\phi\acute{\epsilon}\tau\epsilon\rho\sigma$ into *vester* (compare $\sigma\phi\acute{\eta}\zeta$ with *vespa*) just as they converted $\sigma\phi\hat{\omega}i$ into *vos*. It must be observed, that the use of the reciprocal in the third person, is infinitely more frequent than its use in the first and second persons; and the reason is plain: for as all pronouns denote relations of place, and the primitive pronouns differ only in the degree of nearness to the *here*, a pronoun expressing as the reciprocal does, a special nearness, would be more naturally and more frequently superseded by the first and second personal pronouns than by the third, in other words, there might be a necessity for the expression of a particular kind of nearness in the third person, which could arise but seldom in the case of the other two persons.

We have before shown how the stem of the second personal pronoun (element **Fa**) enters into $\sigma\phi\hat{\omega}i$; it will be equally easy to point out the etymological connexion of $\sigma\phi\epsilon$ and $\acute{\epsilon}$. That the latter was a digammated word is well known, and we have shown before how often the digamma was a representative of the double sound *sv*, as in $\eta\delta\acute{u}s$ = **F** $\eta\delta\acute{u}s$, compared with *svâdus* (Sanskrit) *suâvis* = *svadvis*, (Latin) and $\acute{\epsilon}\kappa\upsilon\rho\acute{o}s$ = **F** $\epsilon\kappa\upsilon\rho\acute{o}s$, compared with *çvaçura* (Sanskrit). The Latins dropped the labial in *se*, and vocalized it in *sus*; or omitted the sibilant as in *vos* and *vester*; similarly the ordinary Greek omitted the labial, and

softened the sibilant into an aspirate. This intimate etymological connexion between the reflexive or reciprocal pronoun, and that of the second person, throws very great light on both. It was to express an idea of relative *nearness* that the second of the old pronominal roots was employed from the first: it is the same idea of relative *nearness* that constitutes the distinction between *ἐ* and *ἐκεῖνον*, between *hic* and *ille*, between *questo* and *quello*.

The Dorian forms *ψέ*, *ψίν*, deserve notice from their constant appearance in Latin. We have in Ennius *sāpsa*, and in Plautus *eāpse*; in the former word the enclitic is inflected as well as the personal pronoun, and in more modern Latin the form *i-pse* always retains its first syllable unaltered, while the *-pse* is subjected to inflexion in every case. This alone should be a confutation of those who fancy something essentially accusative in *ἐ*. The same may be said of *ἐ-τερος*, which must be connected with this pronoun and cannot be derived from *ἐν*, as Bopp seems to suppose (*Demonstrativstämme*, p. 14).

We come now to the most important part of this subject: namely the discussion of the indefinite, interrogative, and relative pronouns. In the Latin language these three pronouns contain the same element; the question is whether this is also the case in Greek and Sanscrit, a question to which we should be inclined to seek for an affirmative answer, as well from the analogy of the Latin, as from general considerations. In our own every-day language we constantly use a demonstrative for a relative, and we must be conscious to ourselves of frequently using a demonstrative sentence with a difference of tone in an interrogative sense. This alone would lead us to believe that there cannot be any radical difference between the demonstrative and these particular kinds of pronouns. A little investigation will satisfy us that in the Greek and Sanscrit languages they are all etymologically identical, and all connected with the pronoun of the second person (element **Fa**).

The Latin interrogative and indefinite are both written *quis*, the relative is written *qui*. In these words therefore the root is *qv-*, or *kv-*. It has been already remarked how a double consonant-sound like *kv* may be superseded by a single representative of one of its two constituent parts. This is particularly the case with the digamma sound, which we have shown

was this same compound sound *kv=kp*. There are many instances in which this compound sound in Latin words is represented in Greek, Sanscrit, and Gothic, or one of them, by one of its elements; for example, we have the Latin *e-qv-us* compared with the Sanscrit *açvas*, with the Gothic *aihvus*, and the Greek *ἵππος* (by a change of the guttural from *ἵκπος* = *ἵκκος* Æolic); *co-qv-o* compared with the Sanscrit *pach*, and the Greek *πέπω*; *o-qv-ulus* compared with the Sanscrit *aksha*, and the Greek *ὄμμα* = *ὄππα*; *lin-qv-o* compared with *λείπω*; *qv-atuor*, and *qv-inqv-e* compared with the Sanscrit *chatur*, and *panchan*, Greek *πέτορες*, *τέτορες*, (*τέσσαρες*) and *πέμπε*, *πέντε*; *a-qv-a* compared with Sanscrit *ap*, Gothic *ahva*; *se-qv-or*, compared with the Sanscrit *sajj*, and Greek *ἔπομαι*. We may also compare the Latin *an-gv-is* with the Sanscrit *ahis*, and the Greek *ἔχis*. Similar changes have taken place even in the same language; thus, to take an instance in point, the Oscans, according to Festus, wrote *pitpid* for *qv-id-qv-id*, and the terminations *-qvam*, *-ce* were identical with *-piam*, *-pe*. The guttural element *ce*, which thus appears as a substitute for the labial *pe*, was further softened into *hi*, as is shown by a comparison of *hi-c* "this," *ci-s*, *ci-tra*, "on this side," *ci-terio* and *ci-timo*. Accordingly, if all the Sanscrit and Greek forms of the relative, interrogative, and indefinite, are resolvable into one or other of the elements of this compound Latin consonant, we are entitled to conclude in favour of their original identity with one another. The full form is preserved in the Gothic *hver*, *hva*; we pronounce the labial only in *which*, *what*, and the guttural only in *who*, *how*.

We now turn to the Sanscrit forms. This language has three interrogative stems, *ka*, *ki*, *ku*: thus, from the first and second, *kas*, *ka*, *kim* = *quis*, *quæ*, *quid*? from the second, *kiyan*, *kiyati*, *kiyat* = *quotus*, *quota*, *quotum*? and from the third, *kutas* = *unde*? *kutra* and *kva* = *ubi*? From the second of these interrogative stems comes by the softening process which is always going on in languages, the indefinite *chit*, just as *church* from *kirk*, *chambre* from *camera*, &c. This particle, also written *chana* when added to the interrogative, gives it the sense "any one," "whosoever," "a certain person," just like *quis-quis*, &c. in Latin: thus, *kach-chit* (from *kat-chit*, used as an interrogative particle like the Latin *an* and *num*), *kaç-chit*, *kaç-chana* = *ali-*

quis. The copulative conjunction *cha*, also from this root, agrees as well with the Latin *que* as with the Greek $\tau\epsilon$, the connexion of which is otherwise shown by a comparison of the forms $\acute{o}\tau\epsilon$, $\pi\acute{o}\tau\epsilon$, with $\acute{o}\kappa\alpha$, $\pi\acute{o}\kappa\alpha$. It appears unsoftened in the Vêda-forms *mâ-kis*, *nakis* = *nequis*, (softened again in the Zend *mâ-chis*, *naê-chis*) in *mâ-kir*, *na-kir*, *mâ-kim*, *na-kim* = *nisi*, *non* (Colebrooke, *Gramm.* p. 121). A comparison of these words with *ni-hil*, *ne-quid*, together with the analogy between *hi-c* and *ci-s* before pointed out can leave no doubt in our minds as to the connexion of these terminations with the second pronominal element **Fa**. The Sanscrit relative is *yas*, *yâ*, *yat*; the *y* standing for the aspirate in $\acute{o}\varsigma$, $\acute{\eta}$, $\acute{o}$, according to what we said upon *yushmé* and *ὑμεῖς*. That the demonstrative meaning entered largely into this relative, appears from a comparison of the Zend demonstrative *yim*, Latin *jam*, "at this time," and though the relative sense is preserved in *yadi*, "when," the demonstrative certainly predominates in *yadî*, "by this" = "if" (comp. *εἰ* and *σι*). It will be remembered that the German *wenn* signifies both "when" and "if." It may be concluded, then, that the Sanscrit interrogative, indefinite, and relative, spring from the guttural part of the digamma, which is the initial of the second pronominal element.

The indefinite and interrogative pronouns in Greek are both written $\tau\iota\varsigma$, the distinction between them being that one is an enclitic, the other accentuated; the one being written after, and the other before, the word to which it refers: in the former case, the want of accent unites the noun and its corresponding indefinite so closely, that they may fairly be considered as one word. That $\tau\iota\varsigma$ is not connected with the third pronominal root *ta*, as might at first sight be supposed, appears, to a certain extent, from the fact, that their uses in Greek are absolutely and diametrically opposite. We are not speaking here of the nominative, masculine and feminine of the Greek article, which we believe to be of the same origin with the relative, &c., but of the objective cases which $\tau\iota\varsigma$ externally resembles. The article $\acute{o}$, $\acute{\eta}$, $\tau\omicron$ is a pronoun which would not by itself express with sufficient definiteness any particular object, even though that object may have been mentioned before: the name of the object is, therefore, added to avoid a vague generality. Conversely, when it is desirable to express that some class is known,

but not a particular individual of that class, the general attributive noun is put first, and the indefinite word after it. And thus, if it is necessary to lay particular emphasis on the *class*, the *individual* of which we do not know, a Greek would not hesitate to prefix an article and affix an indefinite to the same word: thus in Soph. *Æd. Tyr.* 107.

τοῦτου θανόντος νῦν ἐπιστέλλει σαφῶς
τοὺς αὐτοέντας χειρὶ τιμωρεῖν τινάς,

i. e. “the murderers (for we know he was *murdered*) whoever the particular persons may be (for we do not know that):” and thus *Ædipus* immediately asks οἱ δ’ εἰσὶ ποῦ γῆς; “where are they?” a question which shows how the interrogative might have arisen from this use of the indefinite, with merely the change of tone indicated by the accent: γυνή τις—τίς γυνή; “a woman somewhere”—“where?” But, if τις is not connected with the stem *ta*, how is it to be explained? It is sufficiently obvious, that τις has no connexion with either of the elements of the digamma: there is, however, abundant reason to believe, that it is not the primary and genuine, but a secondary and corrupted form of the original interrogative and indefinite. We find traces both of the labial and of the guttural element, even in the existing state of the language: we have the former in the Attic words ποῦ, ποῖ, πότε, πόθι, πόθεν, πόσος, ποῖος, πότερος, &c., and of the latter in their Ionic equivalents κοῦ, κοῖ, κότε, κόθι, κόθεν, κόσος, κοῖος, κότερος, &c. The latter of these two forms appears immediately in the Latin word *cur*, and also in (c)*ubi*, (c)*unde*, (c)*uter*, (c)*ubi*, (c)*ut*, as we may fairly infer from the compounds *ali-cubi*, *ali-cunde*, and from a comparison of the Latin *amo* with the Sanscrit *kāmayāmi*. That these words, however, are only the older and more genuine forms of the interrogative τίς, appears from a comparison of τέτορες, τε, ὅτε, &c. with πέτορες, καὶ, ὅκα, &c., and by the identity of πέντε with *quinque*, Sanscrit *panchan*, &c., so that τίς is merely a corrupted form of *Fis*. We have shown that the Sanscrit relative *yas* is another form of the Greek ὅς (= σός), and it appears that the indefinite and interrogative τις, τίς are identical with *chis*, *kis*. Therefore, as the natural changes, which are always at work upon a language as long as it is a spoken one, continued longer in operation in Greek than in Sanscrit, we con-

clude that the Greek relative was also, in the Pelasgian state of the language, identical with the indefinite and interrogative.

The original demonstrative power of the Greek interrogative stem κ (ϵ^a) is still preserved in a number of words in common use, such as $\kappa\acute{\alpha}$ - $\tau\alpha$, $\kappa\epsilon\hat{\iota}$ - $\nu\omicron\varsigma$, $\kappa\alpha\acute{\iota}$, $\kappa\epsilon\nu$ ($\kappa\alpha$ Doric) and $\gamma\epsilon$ ($\gamma\alpha$ Doric). This root may also be recognized with a *demonstrative* power in the modern French *ce*, *ci*, *ce-tte*, *ce-ci*, *ce-lle*, and in the Italian *ci*. The use of *ci*, as the accusative plural of the first personal pronoun, is an additional illustration of the demonstrative nature of that pronoun. We must bestow a little consideration upon some very important words indicating relations of time into which this root *kv* (under certain regular varieties of form) enters with the demonstrative signification. The Sanscrit word for "yesterday" is *hyas*, the Greek $\chi\theta\acute{\epsilon}\varsigma$, the Latin *her-i* from *hes-i* (*hes-ternus* Sanscrit *hyas-tanas*), and the Gothic *gis-tra*. All these words manifestly contain the same element *kv-*, represented by *hy-* in the Sanscrit word, by $\chi\theta-$ in Greek, by the common aspirate in Latin, and the guttural in Gothic. We do not believe that the syllable *-as* is, as Bopp suggests (*Vergl. Gramm.* p. 568), a mutilation of *divas*. In a word of such common use, an adjective pronoun signifying nearness might be used without any substantive, just as *bruma* (= *brevima*) is used for "the shortest day" without any addition of *dies*. The same root also enters into the Sanscrit word *çvas* (= *kvas*), Latin *cras*; these words imply nearness as well as *hes-*, &c., but as the nearness is used with a prospective and not a retrospective reference, a different form of the same root has been adopted. The word *peren-die* "another day" (*para* "another", Sanscrit) should also signify "tomorrow," but all-powerful custom has assigned to it the meaning of "the day-after-tomorrow." The word *vesper*, $\epsilon\sigma\pi\acute{\epsilon}\rho\alpha$ "evening," is made up of the pronoun *ves* (= *hes* = *chthes* = *gis* = *hyas*), and the pronominal adjective *para*, *pera*, which we have seen in *peren-die*, only here *para* is used in the sense of "late" or "after," as in *parâhna* "the afternoon," "the latter part of the day" (from *para* "after" and *akan* "a day"); here the initial pronoun, retaining its signification of nearness, is applied by another change in the association to a part of the present day, and *vesperus* means "this day late" or "after this day." These transitions by association are all so many facts, the reasons for them, though easily

explained are most easily felt, and it is better to investigate these curious time-adjectives by the application of such a simple principle, than by the hypothesis of almost impossible mutilations, as Bopp does. The word *ἡμέρα* itself, the second part of which (*μερ-*) is evidently the element of *μέρος*, may be connected with the Sanscrit root *dyâ* (= *jâ*). Compare *ἥπαρ*, *jecur*, *yak-rit*, &c.: so that *ἡ-μέρ-α* will signify "the light," "the part of the twenty four hours during which the sun shines." Or rather, to go farther back, it may be the preposition *διά*, *dya* = *ja*, which appears in *ἡμισυ* = *διά-μεσος*, and which we have no hesitation in recognizing in the adjective *ἡμερος*, the regular antithesis to *ἄγριος*. We consider this word as originally applied to a country through which there was a road or passage, a country divided by a road (*διάμερος*), just as *ἄγριος* was properly applied to a rude open country with nothing but *ἄγροι*. This appears from the following passages: *Æschylus, Eumenid.* 12—14.

πέμπουσι δ' αὐτὸν καὶ σεβίζουσιν μέγα
κελευθοποιοὶ παῖδες Ἡφαίστου, χθόνα
ἀνήμερον τιθέντες ἡμερωμένην.

Plato *Legg.* p. 761 A. ὁδῶν τε ἐπιμελουμένους, ὅπως ὡς ἡμερωτάται ἕκασται γίγνωνται. The effect of such road making on civilization appears clearly enough from what Aristotle says of the Herculean way, and of the protection afforded to those who travelled upon it (*περὶ θαυμασίων ἀκουσμάτων*, c. 85. p. 837 Bekker). We consider *dies*, *dyâ*, &c. of pronominal original, like the particle *δή*, which properly refers to time.

From the facts here stated, we are entitled to conclude, with regard to the pronouns in general, that they were all originally demonstrative: that there are three primitive pronouns, that the second of these, which indicates nearness to the *here*, gave birth under the form *Fa* to the reflexive pronoun and the relative, which are identical with it, and that different modifications of this same second personal pronoun were subsequently used to express all relations of nearness, till at last in modern Italian a word formed from the same root came to be used to express the *here* itself, that is, the first personal pronoun.

The adjectives formed from pronouns constitute an interesting subject immediately connected with that which we have been discussing. In regard to the possessives formed from the personal

pronouns, it appears singular that, while those from the second and third person are regularly formed, the possessive of the first pronoun, ἐμός, contains the adscititious ε which we have noticed as an occasional prefix to the objective cases of the pronoun itself: there is however reason to believe that the original form of this pronoun was μεός, like the Latin *meus*, which is quite regular¹. The Sanscrit possessives are *madîya*, “mine,” *tvadîya*, “thine,” *tadîya*, “his.” The termination in these adjectives is *-îya*. The first syllable of the two former is *mat*, *tvat*, the ablatives of the pronouns. The only ablative of the third person which is in use is *tasmât*, but it is very likely that a shorter form, analogous to the ablatives of the other two pronouns, was once in existence; at all events, constant use would easily generate such an abbreviation in the compound. This termination is also found in the Greek adjectives of quality οἶος (ὁ-ιος) ποῖος (πο-ιος) τοῖος (το-ιος,) the *d* having dropt out, just as the *s* has been absorbed in the genitives in *-οιο*, in which we should expect *-σιο* on the analogy of the Sanscrit genitive ending *-sya*, compare ἐδίδουσο, ἐδίδου, δίδουσο, δίδουο (Bopp *Vergl. Gramm.* p. 220). The *d* is preserved in ἰδ-ιος from the pronoun ἴ. The force of this termination in Greek is invariably to denote *kind* or *quality*: we consider the Sanscrit termination *-îya*, which is compounded of the demonstrative *i* and the relative *ya*, and signifies “that which” as a sufficient explanation of the fact². The Greek pronominal adjectives signifying *quantity* are ὁ-σος, πό-σος, τό-σος, &c. We have elsewhere pointed out that the termination *-σος* signifies “a collection” or “aggregate,” even when found as a part of nouns, and it obviously bears the same sense in these pronominal words. But how did it get that sense? It cannot be doubted that ἴ-σος has the same termination. Now it is well-known that this word was originally pronounced ἴ-συος, as appears from the necessities of the metre in Homer. The labial was, however, dropt in the course of time, and ἴσος appears in all the later poets with the first syllable short, so that this is no reason for denying its connexion with ὁ-σος, &c. in point of termination. As ἴ-σος and τό-σος are synonyms, both signifying “so great,” i. e. “equal,” an examination of the common part in these words will lead to a proper interpretation of the affix

1. See above, p. 164.

2. In like manner the relative stem κο-

expresses a quality in such adjectives as
γραμματ-ι-κός.

σος = Fos = σφός. This word implies “all that belongs to the person near us,” a meaning which includes in it the idea of a collection or aggregation, and this is just what we want. There is no occasion therefore to connect this ending with the Sanscrit *-vat*, or *-vant*, though this is of course the origin of the Latin *quantus*, *tantus*, &c., for *tantus* is connected with the Sanscrit *tâvant*, just as *malo* is with *mavolo*. We do not think Bopp is right in deriving from this stem the Latin adjectives *opulentus*, &c. by a de-vocalization of the *l*, because conversely the French have turned the Italian *al* into *au* (*über den Einfluss der Pronomina*, &c. p. 7); nor do we concur with the same eminent philologist in connecting the terminations of ἡ-λίκος, πη-λίκος, τη-λίκος, immediately with the Sanscrit verb *driç*—“to see” (Greek δέρκω). It is true that the Sanscrit *ta-driça*, &c., are perfectly synonymous with τη-λίκος, &c., but it is more in accordance with the general analogies of the Greek language to consider -λι-κός as a compound of two terminations *la-*, *ka-*, each of which is found separately at the end of words. The second part of the compound is omitted in the Latin *-lis*, as in *tâ-lis* (τη-λι-ξ), *qua-lis* (πη-λι-ξ), &c. It is possible that the syllable *λι-* may be connected with the root of a Greek verb (λάω) synonymous with δέρκω, but δέρκω is itself a compound verb as well as the Sanscrit ending *dri-ça*, and though, as we shall see hereafter, the root *λι-* may be of the same origin with part of the root *d-ri-ç*, this does not justify Bopp’s mode of proceeding with regard to these terminations. At one time he bases his argument on the interchange of the *d* and *l*, as in δάκρυμα, *lacryma* (*über den Einfluss*, &c. p. 8), at another time on the interchange of *r* and *l* (*Vergleich. Gramm.* p. 599); but we have both *d* and *r* in *driç*-, and are we to suppose that they can both be turned into an *l*?¹ The Greek termination -λίκος or -λιξ (ἡλιξ, ὁμηλιξ) runs through most of the sister languages. Thus we have in Gothic *sva-leiks*, *hvê-leiks*, Anglo-Saxon *thy-lic*, German *ähn-lich*, *so-lîcher* (so-like, such), and in English *like*. In Latin many very common adjectives are formed with this termination: e. g. *æ-qua-lis* (from *æ-quus*, Sanscrit *é-kas* “that which”), *rega-lis*, *virî-lis*, *missi-lis*, *humi-lis*, *simi-lis*, *fame-licus*, &c. The word *fe-lix* also contains this termination; the first part of the word is connected, as Bopp suggests (*Vergleich. Grammatik*,

1. The Prâcrit corruptions *târisó*, &c. prove nothing.

p. 606), with the Sanscrit *bhāj*, not, as others have supposed, with *fe-tus*, *fe-tura*, *fe-mina*, &c. It is related to *fau-stus*, *fav-or*, &c., and the Greek *φάFos* (*ὑπο-φau-σις*). It might be written *φauλιξ* in Greek characters¹, like *φau-λος* “light,” “blown about by every breeze” (*FάFω*, *Fav-onius*), and signifies literally “light-like,” i. e. “brilliant,” “splendid.”²

1. We are aware that the surname of Claudius *Felix* is written *Φηλιξ* in Josephus XX, 6, *Act. Apostol.* xxiv. 3. Suidas s. v. *Κλαύδιος*. This is not, however, an etymological transcription, but only an at-

tempt like the *ὦκ ἄγε* (*hoc age*) of Plutarch to represent the sound of the Latin word.

2. On the connexion of “light” and “air”, see Book IV. Ch. 5.

CHAPTER II.

THE NUMERALS.

As it is the tendency of inflected languages to become more and more abstract, as they develop themselves syntactically by means of writing, and, by striving after generalization, to lose the immediately perceivable meaning of their individual words, we might expect that this tendency would soonest be realized in the numerals. The use of numerals at all is an abstraction, and one of the highest kind; it is stripping things of all their sensible properties and considering them as merely relations of number, as members of a series, as perfectly general relations of place. Hence it is, that the short-hand of written language has arrived at its completion in numerals sooner than in any other words, for while all other words are expressed by combinations of letters, the words expressing abstract number have, in all languages, a set of distinct symbols or cyphers for their expression. In the language of Algebra the same method has been carried so far, that we can now, by a systematic combination of single letters, carry on the most complicated analytical reasonings in all sciences based upon one or other of our primary intuitions of space and time.

It was hinted in the last chapter, that the three first numerals are the three personal pronouns: this we shall now endeavour to prove by considering them in detail.

The root of the first personal pronoun is *ma*; it signifies "that which is here." The natural connexion between the ideas of *here*, *that which is near to the here*, and *there*, and the numbers "one," "two," "three," needs no formal exposition: the vulgarism "number one" as a synonym for the first person, and the *proximus sum egomet mihi* of the Latin comedian speak in the plainest terms for this identity. Our business is to establish the etymological fact.

The Greek word expressing the number one was a regularly inflected adjective; in the ordinary writers we find *εἷς*, *μία*, *ἓν*, but in Homer the feminine is written *ἷα* (*Iliad* iv. 437. xiii. 354.

xxi. 569), in which, as well as in the ordinary masculine and neuter, we discern no traces of the first pronominal root $\mu\alpha$. Döderlein (*Lat. Synon.* iv. p. 52) supposes that $\acute{\iota}\alpha$ is connected with $\mu\acute{\iota}\alpha$ as *eo* is with *meo*, and $\acute{o}\lambda\alpha\acute{\iota}$ with *mola*. The following investigation will show that there is no connexion between $\acute{\iota}\alpha$, or as it should be written $\acute{\iota}\alpha$, and $\mu\acute{\iota}\alpha$.

Man is naturally led to adopt one of two methods of arithmetical reckoning: the decimal, suggested by his own hands and feet, and the duodecimal, derived from the twelve moons. The latter system was of more frequent use in ancient times than it is now, though we still have our *dozen* as a distinct term, and still divide the day into two portions of 12 hours each, and carry the same division into our tables of weights and measures. Among the Greeks, the prevalence of this system is more strongly shown by the 12 gods, most of them clearly connected with the months, and by the frequent occurrence of the number 12 in political subdivisions. We find that most ancient states had some regulative number which was the basis of their social organization. "Twelve," says Niebuhr, "was the fundamental number of the Ionians, which appears in their towns in the Peloponnesus and in Asia, as well as in the Attic $\tau\rho\iota\tau\tau\acute{\upsilon}\epsilon\varsigma$. Their primary number was four; then each quarter was subdivided into three" (*Hist. of Rome*, ii. p. 20). He should rather have stated that the primary number was twelve, a number suggested by the changes of the moon, and that this number was divided into three tetrads. The influence of this subdivision upon the formation of the numerals will be seen by and by. But if twelve was the regulative number of the Ionians, and if this number was, as is highly probable, suggested by the number of the moons or months, should we not expect that the words for an "unit" and a "month" would be identical? Now the Ionian word for a month or moon is $\mu\epsilon\acute{\iota}\varsigma$ (Homer, *Iliad* xix. 117. *Hymn. Merc.* 11. *Hes. é.κ.ή.* 559. *Herod.* ii. 82), and this is also found in Æolic (Pindar, *Nem.* v. 82. comp. Suidas and Zonaras under the word $\mu\epsilon\acute{\iota}\varsigma$). The feminine $\mu\acute{\iota}\alpha$ therefore perfectly corresponds with this form. We shall now show that the common particle $\mu\acute{\epsilon}\nu$ is the regular neuter of $\mu\epsilon\acute{\iota}\varsigma$.

A full discussion of all the usages of $\mu\acute{\epsilon}\nu$, as a conjunction, belongs rather to the syntax of the conjunctions than to the present subject. We shall now insist only on those of its uses

which most strikingly show that it means “the first thing,” “in the first place.” This amounts almost to a certainty when it is considered, that, in its regular use, it is always opposed to *δέ*, which can be proved to mean “in the second place.” It is also proved by this circumstance, that *μέν* never stands alone without suggesting the idea of something that is to follow. Thus, when Socrates is going to catechize Meno’s slave, he asks the master, “*Ἕλλην μὲν ἐστὶ καὶ ἐλληνίζει;*” “he is a Greek, I suppose, and talks Greek” (Plato *Meno*, p. 82 B). Here an *εἰ δὲ μή* is obviously implied “if he is not, he will not serve my purpose of questioning him:” so also in the answer *πάνυ μὲν οὖν*, which is so common in Plato’s dialogues, there is a manifest suspension of part of the sentence: “you are right, but what then?” (*τί δ’ ἔπειτα;*) and there is always an expectation of something ulterior in the use of *μέντοι* in answers: e. g. Aristophanes *Equites*, 890. *τὸν καῦλον οἶσθ’ ἐκείνον τοῦ σιλφίου τὸν ἄξιον γεγόμενον;* “do you remember the fall in the price of laserpitium?” the Demus answers *οἶδα μέντοι*—“to be sure I do and what of it?” In such phrases as *ἢ σοὶ μὲν ἡμεῖς πανταχῇ δρῶντες φίλοι* (Soph. *Antig.* 634), the other part of the opposition (*εἰ μηδενὶ ἄλλῳ*) is so obvious that it is omitted. There are also cases where *μέν* standing alone recalls the idea of the first person, and is nearly equivalent to the Italian phrase *in quanto a me*, e. g. Plato *Crito*, p. 43 D. *οὗτοι δὲ ἀφίκται, ἀλλὰ δοκεῖ μὲν μοι ἥξειν τήμερον.* In other passages it means “first of all,” “above all others,” as in Homer, *Iliad* v. 893. *Ἡρῆς, τὴν μὲν ἐγὼ σπουδῇ δάμνημ’ ἐπέεσσιν.* From all this it appears certain that *μέν* is the neuter of *μεις*, which bears the same relation to *men-sis* that *θεῖς* (*θένς*) does to *θέντος* (Böckh, *Staatshaush.* II. p. 395).

We have therefore *μεις*, *μία*, *μέν*, as complete in all its parts as *εἷς*, *ἴα*, *έν*, and containing the elementary pronominal form *με*. We find the same root and with the same signification in *μόνος* “only,” “one-ly” (Ionic *μῶνος*, Doric *μῶνος*), which answers also to the Gothic possessive *meins*.

The first Sanscrit numeral *ékas* is, as we have before suggested, related to *aham*, the nominative of the first pronoun; it is represented by the Greek *έκας*, *έκάτερος*, *έκαστος*, and is probably formed, as Bopp supposes, from the demonstrative stem *é*, and the relative or interrogative *kas*, with the meaning “that

which;" we shall speak again of this word in a future chapter. The common Greek $\epsilonἷς$ = $\epsilonῖς$ is connected with the Sanscrit demonstrative $\acute{e}$ - na ($aina$), with the Gothic $aina$, and with the Latin $unus$, most anciently written $oinos$, by the substitution of an unaspirated long for an aspirated short vowel before explained, just as $\acute{e}kas$ and $\acute{e}kas$ are connected. The same word also occurred in Greek (see the Commentators on Hesychius, *sub vv.* $\acute{o}\acute{\iota}v\eta$ and $\acute{o}\acute{\iota}v\acute{\iota}\zeta\epsilon\iota\nu$), and we have it with an s instead of the aspirate in the Latin words $sem-el$, $simplex$, and $sin-gulus$, just as $\acute{e}kas$ appears under the form $secus$ in the same language.

It is clear that the first Greek numeral contains the first pronominal element; it is no less so that the word expressing the number two is identical with the second personal pronoun. In the last chapter it was suggested that the three original pronouns would probably be the three tenues pa , ka , ta ; that the first might be represented by the cognate sounds ma or va , and the second by that double sound Fa , a combination of the guttural and labial, which so often appears in certain languages of the Indo-Germanic family, where we have only a labial or a guttural in the others. It was also mentioned that there were modes of forming words of the same signification with these elements, by combining them with one another, or with the element ra , signifying motion or beyond. Thus, the compound ta - va would be equivalent to the second pronoun, ka - ra , or ta - va - ra to the third, which might also be expressed in a stronger manner by ta - ra . Now it is the first of these combinations which constitutes the usual form of the second personal pronoun, the labial element being however immediately subjoined to the dental, and in most cases vocalized. It is this form of the second pronoun which so exactly coincides with the second numeral. In most cases, however, the medial d is substituted for the tenuis t . Thus, we have in Sanscrit $dvau$, in Zend dva , in Greek $\acute{\delta}\acute{\upsilon}\omega$, $\acute{\delta}\acute{\upsilon}\omicron$ (= δFo), in Latin duo (dvo), and in Gothic $tvái$. In this, as in other cases, where two consonants make one sound, we frequently find one of them standing as a representative of both. Sometimes the dental is omitted as in $\acute{\alpha}\mu$ - $\phi\omega$ ($\acute{\alpha}\nu\acute{\alpha}$ δFo), in $F\epsilon\acute{\iota}κατι$, vi - $ginti$ and vin - ζati instead of $\delta F\epsilon\acute{\iota}$ - $κατι$, dvi - $ginti$, $dvin$ - ζati : so also in $bellum$, $bini$, bis , bes ¹, from $dvel$ - lum , $dvini$, $dvis$, $dves$. At other times, on the contrary, the labial

1. See Salmas. *de Mod. Usurarum*. p. 252.

is dropt, as in $\delta\acute{\epsilon}$, $\delta\acute{\epsilon}\omega$, $\delta\acute{\iota}\varsigma$, $\delta\iota\sigma\sigma\acute{o}\varsigma$, $\delta\acute{\omega}$ -δεκα, $\delta\iota\mu\acute{\eta}\tau\omega\rho$ (Sanskrit *dvimâtrī*).

It has been remarked that the origin of the second personal pronoun is the idea of comparative nearness. An examination of the second numeral will show that the same is the case with it. That $\delta\acute{\epsilon}$ is the shortest form of this numeral, is proved by its constant use in the obvious sense of "in the second place," and by the verb $\delta\acute{\epsilon}\omega = \delta\text{F}\acute{\epsilon}\omega$, "to bind," (compare *twine*, *two*). Besides, the numeral $\delta\acute{\upsilon}\omicron$ was also written $\delta\acute{\upsilon}\epsilon = \delta\text{F}\epsilon$: this might be inferred from the Attic form $\delta\nu\epsilon\acute{\iota}\nu$, and we clearly read it in an Arcadian Inscription (1511, l. 7, Böckh) $\mu\nu\acute{\alpha}\varsigma \delta\acute{\upsilon}\epsilon \kappa\alpha\acute{\iota} \tau\rho\acute{\iota}\acute{\alpha}\kappa\omicron\nu\tau\alpha$. Now this particle $\delta\acute{\epsilon}$ is often used in composition to express comparative nearness. In this sense it appears in $\acute{o}$ -δε "the man near," &c. It is also used to express motion towards, or a tendency to become near, as in 'Ολυμπόν-δε "towards Olympus," οἰκόν-δε "homewards," $\text{'Αθήναζε} = \text{'Αθηνάς-δε}$ "towards Athens." It is found with the same meaning in $\delta\epsilon\upsilon\rho\omicron = \delta\acute{\epsilon}\text{F}\rho\omicron$, a word which requires some explanation. We have before remarked on the change of place to which the digamma is liable: there is nothing singular, therefore, about the change from $\delta\text{F}\epsilon$ to $\delta\epsilon\text{F}$ -. That such a change has taken place in this root, is manifest from the fact, that $\delta\epsilon\upsilon\tau\epsilon\rho\omicron\varsigma$ is the only ordinal of $\delta\acute{\upsilon}\omega$, and that $\delta\text{F}\acute{\epsilon}\omega$ to bind (which we have shown to be immediately formed from this root) becomes *deb-eo* in Latin, and *dev-o* in Italian, in the sense of duty, i. e. that which is binding. The word $\delta\acute{\epsilon}\text{F}\rho\omicron$ signifies "in this direction," $\delta\epsilon\upsilon\tau\epsilon\rho\omicron\varsigma$ "a man who is nearer to us than another man," and $\delta\epsilon\upsilon\tau\alpha\tau\omicron\varsigma$ "a man who is nearest to us of a series of men," i. e. "the last," and thus it is used as a synonym for $\acute{\upsilon}\sigma\tau\alpha\tau\omicron\varsigma$.

There is another word of the highest interest connected with the second numeral, which these combinations will enable us to explain: we mean the pronoun $\acute{o}$, $\acute{\eta}$, $\tau\acute{o}$ δεῖνα, or, as we would write it (after the analogy of $\acute{o}\delta\epsilon$, $\acute{\eta}\delta\epsilon$, $\tau\acute{o}\delta\epsilon$),— $\acute{o}\delta\epsilon\iota\nu\alpha$, $\acute{\eta}\delta\epsilon\iota\nu\alpha$, $\tau\acute{o}\delta\epsilon\iota\nu\alpha$. This word signifies, that, though we know perfectly the particular person or thing we are speaking of, we either cannot or will not mention the name: it was, therefore, natural enough that a word, signifying proximity, should be added to the personal pronoun, to refer to a person or thing definitely conceived, but indefinitely mentioned. Now we have seen that the first personal pronoun, when used to express the first nu-

meral, was lengthened from $\mu\epsilon$ - into $\mu\epsilon\acute{\iota}\varsigma = \mu\acute{\epsilon}\nu\varsigma$. We should expect, therefore, that the second pronominal root $\delta F\epsilon$ or $\tau F\epsilon$ would be analogously lengthened into $\delta F\epsilon\acute{\iota}\varsigma = \delta F\acute{\epsilon}\nu\varsigma$ when used to express the second numeral. This termination $-\nu\varsigma$ ($-ν|ο|ς$) was, as we shall see under the prepositions, a strong expression of locality, and this sense is highly appropriate for a transfer of the weaker relations of space which constitute persons, into these stronger ones which originated the numerals. Let us inquire then, if there ever was such a word as $\delta\epsilon\acute{\iota}\varsigma$. The author of the *Etymologicum Magnum*, says, (p. 639, l. 11, Sylb). $\text{Οὐδείς. Ἰστέον ὅτι τοῦ οὐδείς, ὅτε ἰσοδυναμεῖ τῷ οὔτις, δύο μέρη λόγου εἰσί, τό τε οὐ, καὶ τὸ δείς. οὐδὲ γὰρ ἐστὶ σύνθετον. εἰ γὰρ ἦν σύνθετον, ἤμελλε πρὸ μιᾶς ἔχειν τὸν τόνον. πᾶν γὰρ ὄνομα μονοσύλλαβον συντιθέμενον ἀναβιβάζει τὸν τόνον-παῖς, εὐπαῖς· χθὼν, αὐτόχθων· Θράξ, Σαμόθραξ· χωρὶς τοῦ πτώξ, πολυπτώξ.—αὐτοῦ δὲ τοῦ οὐδείς τὸ οὐδέτερον, δέν, χωρὶς τῆς οὐ παραθέσεως ἔχομεν παρὰ Ἀλκαίῳ ἐν τῷ ἐνάτῳ, Κούδέν ἐκ δεινὸς γένοιτο, Ζηνόβιος. So also Chæroboscus (*Bekkeri Anecd.* p. 1362). δέν, ὅπερ ἰσοδυναμεῖ τῷ τι. In common use this word is sometimes indeclinable; but we also find gen. $\delta\epsilon\acute{\iota}\nu\omicron\varsigma$, dat. $\delta\epsilon\acute{\iota}\nu\iota$, accus. $\delta\epsilon\acute{\iota}\nu\alpha$, in the singular, and nom. $\delta\epsilon\acute{\iota}\nu\epsilon\varsigma$, gen. $\delta\epsilon\acute{\iota}\nu\omega\upsilon\upsilon$, accus. $\delta\epsilon\acute{\iota}\nu\alpha\varsigma$, in the plural. The form of the dative plural may be inferred from the forms $\tauοῖς-\delta\epsilon\sigma\iota$, $\tauοῖς-\delta\epsilon\sigma\sigma\iota$. These forms are all regular inflexions of $\delta\epsilon\acute{\iota}\varsigma$ just as $\mu\epsilon\acute{\iota}\nu\iota$, which is found in an inscription, is formed from $\mu\epsilon\acute{\iota}\varsigma$. We may, therefore, reasonably infer that there was originally such a Greek word as $\delta\epsilon\acute{\iota}\varsigma = \delta\acute{\epsilon}\nu\varsigma$ corresponding to $\mu\epsilon\acute{\iota}\varsigma = \mu\acute{\epsilon}\nu\varsigma$. When $\delta\acute{\epsilon}\nu\alpha$ is used in the nominative case, the second part must be considered as an adverb. In regard to the genitive $\delta\epsilon\acute{\iota}\nu\omicron\varsigma$ as compared with $\delta\epsilon\iota\nu\omicron\varsigma$, quoted by Zenobius, we may remark that there was also a form $\epsilon\acute{\iota}\nu\alpha$ for $\acute{\epsilon}\nu\alpha$. See *Lex. de Spir.* p. 240, and Buttmann's *Mythologus*, Vol. II. p. 142.$

From these two words $\mu\epsilon\acute{\iota}\varsigma = \mu\acute{\epsilon}\nu\varsigma$, and $\delta\epsilon\acute{\iota}\varsigma = \delta\acute{\epsilon}\nu\varsigma$, we have $\mu\acute{\eta}\nu$, $\delta\acute{\eta}\nu$, and $\mu\acute{\eta}$, $\delta\acute{\eta}$, which we shall discuss in a future chapter. It may be thought singular that while $\mu\acute{\epsilon}\nu$ preserved the final consonant, it is dropt in the correlative $\delta\acute{\epsilon}$. It is to be remarked, however, that in words of such common occurrence, the shortest forms would naturally be preferred, unless there were some reason to the contrary, as there is in the case of $\mu\acute{\epsilon}\nu$, which would otherwise be confounded with the pronoun $\mu\epsilon$, whereas

no confusion could take place between the second personal pronoun and such a modified form as $\delta\acute{\epsilon}$. Of the omission of ν in such cases, we have other instances in $\kappa\epsilon\nu$, $\kappa\epsilon$, $\acute{\epsilon}\nu\epsilon\kappa\epsilon\nu$, $\acute{\epsilon}\nu\epsilon\kappa\epsilon$, $\pi\rho\acute{o}\sigma\theta\epsilon\nu$, $\pi\rho\acute{o}\sigma\theta\epsilon$.

An objection has been made by Buttmann (*Ausführl. Sprl.* § 70. *Anm.* 7, Note) to the derivation of $\text{o}\acute{\upsilon}\delta\epsilon\acute{\iota}\varsigma$ from $\text{o}\acute{\upsilon}$ and $\delta\epsilon\acute{\iota}\varsigma$, namely, that the forms $\text{o}\acute{\upsilon}\delta\epsilon\mu\acute{\iota}\alpha$, $\text{o}\acute{\upsilon}\delta\acute{\epsilon}\tau\epsilon\rho\omicron\varsigma$ and $\text{o}\acute{\upsilon}\delta\acute{\epsilon}\pi\omicron\tau\epsilon$, manifestly contain $\text{o}\acute{\upsilon}\delta\acute{\epsilon}$. Now it is also a theory of Buttmann's that $\text{o}\acute{\upsilon}\theta\epsilon\acute{\iota}\varsigma$, $\text{o}\acute{\upsilon}\theta\acute{\epsilon}\nu$ are the masculine and neuter of this same $\text{o}\acute{\upsilon}\delta\epsilon\mu\acute{\iota}\alpha$, the δ being turned into a θ by the contact of the aspiration, just as is the case in $\acute{\omicron}\theta$ $\acute{\epsilon}\rho\mu\eta\varsigma$ (found for $\acute{\omicron}\delta$ $\acute{\epsilon}\rho\mu\eta\varsigma$ in an old inscription, Böckh's *Corp. Inscript.* i. p. 32), and as Thiersch would write it in Pindar's $\pi\epsilon\nu\tau\alpha\epsilon\tau\eta\rho\acute{\iota}\theta'$ $\acute{\omicron}\pi\omega\varsigma$, $\acute{\epsilon}\lambda\lambda\acute{\alpha}\theta'$ $\acute{\epsilon}\upsilon\rho\acute{\eta}\sigma\epsilon\iota\varsigma$, (Thiersch's *Pindar*, II. p. 349). It is, therefore, unnecessary to suppose, because an $\text{o}\acute{\upsilon}\delta\acute{\epsilon}$ $\mu\acute{\iota}\alpha$ implies an $\text{o}\acute{\upsilon}\delta\acute{\epsilon}$ $\epsilon\acute{\iota}\varsigma$, which indeed occur as two words in the older writers, and as one word— $\text{o}\acute{\upsilon}\theta\epsilon\acute{\iota}\varsigma$ —in the more recent authors, that there could not be such a compound as $\text{o}\acute{\upsilon}$ - $\delta\epsilon\acute{\iota}\varsigma$. The only question is, whether there is such a word as $\delta\epsilon\acute{\iota}\varsigma$. If so, and it appears clear that there was, $\text{o}\acute{\upsilon}\delta\epsilon\acute{\iota}\varsigma$ is just as allowable as $\text{o}\acute{\upsilon}$ - $\delta\acute{\epsilon}$, or $\text{o}\acute{\upsilon}$ - $\delta\acute{\epsilon}$ - $\epsilon\acute{\iota}\varsigma$.

With these uses of the particles $\delta\acute{\epsilon}$, $\delta\epsilon\acute{\iota}\varsigma$, &c. we may compare the collocation $\delta\acute{\eta}$ $\tau\iota\varsigma$ = *nescio quis* (Heindorf *ad Platon. Phæd.* § 130).

The root of the third numeral in the Indo-Germanic languages is $t + r$ with a short vowel either interposed or subjoined, according to the etymological rule that a vowel may be sounded either before or after a liquid. In Sanscrit we have *trajas*, *tisras*, *trini*, in Greek $\tau\rho\epsilon\acute{\iota}\varsigma$, $\tau\rho\acute{\iota}\alpha$, in Latin *tres*, *tria*. We do not know the nominative of this numeral in Gothic, but the genitive, dative and accusative are *thrijé*, *thrim*, *thrins*. In Latin we have also *ter*, *ter-nio*, and *ter-tius*.

If the second numeral has arisen from the idea of nearness, the third must be the expression for that which is farther. The third personal pronoun *ta* does indeed express the *there*, but for the third numeral a stronger form was required, and therefore the particle *ra* was added to the pronominal root. This particle, which we shall examine hereafter more minutely, expresses the idea of motion from or beyond, the point from which the motion is supposed to begin being indicated by the pronominal element to which the *ra* is subjoined: thus, when added to the third pronoun, it changes the idea of *there* into the idea of that which

is *beyond* or farther than the object denoted by the simple demonstrative. The word *t*(^a)-*ra* is accordingly used in Sanscrit as an affix to pronominal roots, when distance, whether definite or indefinite, is implied: thus we have *amu-tra*, “on the other side”, *ku-tra*, “where?”. In this sense it appears in the Greek adjectives ὀρέσ-τερος, ἀγρό-τερος, δημό-τερος, &c. In Latin this root appears in the preposition *tra*-ns, signifying “beyond”, and it is also affixed to pronominal stems as in Sanscrit; thus we have *ul-tra*, “on that side”, *ci-tra*, “on this side”. It appears too in the word *ter-minus*, “a limit”, which has the form of a passive participle. The most important, however, of the uses of this word is as a suffix, indicating the comparative degree in Sanscrit, Greek, and Latin. Thus we have *ka-taras*, πό-τερος, *u-ter*. In this use the idea of “beyond” is also involved. Thus we are told that in the Chinese language, which has no inflexions, *hou yoong kwo gno* (“he is more vehement than I”), may be translated literally “he is vehement beyond me” (*Quarterly Review*, Vol. L. p. 187). This comparative suffix, as is well known, is used when only two things are to be compared, and this was its original force when employed as the third numeral: for the first numeral signifies, like the first personal pronoun, “that which is here”, the second “that which is near”, the third “that which is farther”. Now far and near are relative terms, and though, for the purpose of expressing a person who is neither *I* nor *you*, an indefinite *there* would suffice, the number “three” must be considered more distinctly in its relation of contrast to the number two. Hence it is that the idea of *there* was extended to that of relatively greater distance, when applied in direct and particular contradiction to the idea of nearness contained in the number two. This comparative ending sometimes appears under a form still more like the common third numeral, as in ἀλλό-τριος, for which, however, the Æolians also wrote ἀλλό-τερος or ἀλλό-τερρος, as they also wrote κόπερα for κόπρια and Πέραμος or Πέρραμος for Πρίαμος (*Etymolog. Magn.* p. 529, l. 22; *Gregor. Corinth.* 639 and 907).

That the Indo-Germanic word for the number four is composed of those for one and three is clearly proved by the following combinations. The oldest Greek form was πέ-τορες; the first syllable bears the same relation to με- that the πέ-δα does to με-τά, and the remainder of the word is only another form of

τρεῖς, ($\tau|_{\epsilon}|\rho\epsilon\varsigma$). The Sanscrit form for this numeral is, masc. *chatvâras*, fem. *chatasras*, neut. *chatvâri*, where the feminine appears to be anomalous; now the same anomaly is found in the feminine *tisras* of the third numeral; it is therefore clear that the last two syllables of the fourth numeral comprise the third. The same appears also from a comparison of *ter* with *qua-ter*, *ter-nus* with *qua-ter-nus*, and *tri-duum* with *qua-tri-duum*. With regard to the first syllable, it is a mutilation of the Sanscrit numeral *êkas*, “one”, which is formed from *ê* dem. and *kas* relative, and is synonymous with *æ-qv-us*: this will show why *-qva* stands for *-ka* in the Latin word for “four”. We have before pointed out how *ki* became softened into *chi*; such a softening would most naturally take place in an abbreviated form like *chatvâras*. By the side of the strong form *chatvâras* we have a weaker form *chaturas*. In Gothic we have *fidvôr* and *fidur-dôgs*, just as we have *quatvor* and *quaternus* in Latin. It will be observed that we generally have *v* or *u* in the second part of the word signifying “four”, although the labial does not appear in the common word for “three”. We have suggested before that the relation of “three” might be expressed by adding the particle *ra* to the second as well as to the third element: and *ta-va-ra*, or *ka-ra*, “motion from that which is near to the *here*”, might signify the third position as well as *ta-ra* “beyond the *there*”. Indeed, these two forms would be more intelligible even than *ta-ra*, for they bear outwardly the form of a comparative of the numeral “two”, and this is the proper idea of “three”.

It is a remarkable fact, that the first four numerals in Greek and Sanscrit, and the first three in Latin, are declined, while all the others remain without inflexion. There must be some reason for this. Now we know that the oldest Greek year was divided into three seasons of four months each: and the sub-division of the fundamental number in the state-division into the factors 3×4 , of which the four was the basis, needs not to be insisted on. The first four numerals, therefore, would be more frequently used as adjectives than any of the others, and for this reason would have inflexions, which the others, whose use would be more adverbial, might want without so much inconvenience. The same remark applies to the corresponding fact with regard to the Roman numerals. Their fundamental number was three; they had three tribes, just as the Ionians had four. Besides, the old

Etruscan year, which was the basis of their civil and religious arrangements, consisted of ten months, not of twelve, and therefore the division into tetrads would not hold with them. That this division into tetrads was observed not only in the old Greek and Ægyptian year of twelve months, but also in the Greek and Sanscrit system of numbers, is clear from the following facts. The numbers two and eight in Sanscrit and Greek have the ordinary dual-ending which is found in the dual number of nouns in those languages; they are written *dv-au*, *δύ-ω*,—*asht-au*, *ὀκτ-ω*. The meaning of this termination is clear in the former case: can we then deny its force in the latter? But if the number eight is really in the dual number, it can only be so as denoting twice four; therefore, the root of the number eight in these languages must be the number four. This root in Sanscrit is *ash-t-*. We have seen that the first part of the Sanscrit numeral, four, is a mutilation of *é-ka* aspirated into *-cha*. Here the whole word is shortened and assibilated into *a-sh-*. The second part wants the letter *r*, which gives the third numeral its particular meaning, as distinguished from the third personal pronoun. That it is wanting here is no argument against the identity of the latter part of the root of the number eight with the number three. In words of common use, when they exceed a certain length, and especially in those which are compounds, the process of shortening and softening always takes place, sometimes to an extent which renders it difficult to discern the elements of which they were originally made up. Who would suppose, on the first inspection, that *concio* was *con-ven-tio*? An additional reason for the hypothesis of a sub-division of the duodecimal basis into tetrads is derived from the fact that in Greek, in which this division seems to have been most called for, the numbers eleven and twelve are single words, *ένδεκα* and *δώδεκα*, whereas the succeeding numbers up to twenty are made up of separate words, connected by *καί*: thus, *τρίς καὶ δέκα*, *τέσσαρες καὶ δέκα*, &c.

There are only two other numerals which appear to contain the roots of the primitive pronominal numbers; namely, six and seven, which commence with the same letters respectively in Greek and Latin. In these words, however, the process of abbreviation and softening has been carried so far that we can only offer a probable explanation of them. On comparing *έ-ξ*, *έ-πτα*, with *se-x*, *se-ptem*, and the Sanscrit *shash*, *saptam*, it

appears exceedingly probable at first sight that the first part in each must be the same. Setting aside, then, this first syllable, we have in all three languages the letters *-pt-* as the element of the second part of the numeral seven, and these letters point at once to the elements of the old *πέτορες* "four." The first part, therefore, must be some mutilated form of the number three, so that *ε'-πτ-α*, &c. will be $3 + 4 = 7$. This also appears from an examination of the corresponding syllable in the number six. Bopp remarks (*Vergleichende Grammatik* p. 443) that as the Zend word for six is written *csvas*, and as *sh* is neither an original letter nor the beginning of any other word in Sanscrit, we may infer that the Sanscrit word should be written *kshash*. A comparison of the Greek and Latin inclines us to believe that the more ancient form would be *ksha-ksh*, for there is an evident reduplication. And similarly the Greek and Latin words would be written *ἑξ* = *σεξ* = *(κσ)ε-κσ-*, and *sex* = *(k)se-ks*, which are perfectly analogous to, and equally indicative of a reduplication with, the Sanscrit. If, therefore, there is a reduplication it must be that the word is composed of two coordinate parts, and as the word is a numeral, this must express that it is a number added to itself, and in the case of number six, this number must be "three." Accordingly, *shash* = *ε'-κς* = *se-cs* = $3 + 3 = 6$. But although it appears highly probable that the numeral is composed of two words, each signifying three, it would be desirable to know how the element *ksh* could bear this meaning. Indeed it would be instructive to inquire, in general, by what consonants this compound is represented in other languages of this family. We shall find on examination *ksh* is represented in Greek or Latin (1) by *x*, (2) by *s*, (3) by *cr*. We will take these three cases in order.

(1) The Sanscrit *kshatra* means "a man of the second or military and regal caste," to which the Zend *ksathra* corresponds. Now we know from Herodotus (VI. 98) that the Greek word which translates *Ξέρξης*, is *ἀρῆιος*, that which translates *Ἀρτα-ξέρξης* is *μέγας ἀρῆιος*. Rosen supposes (*Journal of Educat.* x. 336) that *arta* is the perf. pass. participle of *ri*, which, as appears from a comparison of the Sanscrit *sakrit*, *krimâti*, *mṛityn*, with the Zend *hakeret*, *kerenoit*, *merethyn*, would be written in Zend *ereta* (comp. Bähr *ad l. Herod.*); *arta* therefore means "honoured," and *Arta-xerxes* "the honour-

ed warrior or king" (like *maha-râja* in Sanscrit) and is therefore rather the epithet than the name of a king, as indeed appears from Ctesias *Pers.* 49. 53, 57. βασιλεύει δὲ Ἀρσάκης ὁ μετονομασθεὶς Ἀρταξερξής, and Curtius VI. 6. *Bessus veste regia sumpta, Artaxerxem appellari se jusserat* (quoted by Pott *Etym. Forsch.* I. p. LXV). Nothing is more probable therefore than that Ξέρξης is merely the Greek spelling for *kshatra*. The *ksh* is preserved here in the first letter of the Greek word, but ρξ are substituted for the *tr*. Wilson derives *kshat-tra* from *kshad* Sautra root "to divide, to eat," *Unadi* affix *tra*. The first syllable has undergone many changes. It is transformed into the Persian *shâh* just as *kshaksh* becomes *shash*. Whether *kei* is connected with *ksha*, and *kissra* with *ksathra* (Pott. *Etymol. Forsch.* I. LXVI) is doubtful. (2) Malcolm (*Hist. of Persia*, I. p. 271) translates Satrap "umbrella carrier." We think this far-fetched, and consider Σατράπης to be the nearest approximation a Greek could make to what would be in Persian *kshêtra-bân* (Σατρα-πηνός. Plut. *Lucull.* XXXI. 4) or the Sanscrit *kshêtra-pâ* (we have ἐξαίθραπέυειν in an inscription) "ruler of the country," for, according to Xenophon (*Cyrop.* viii. 6), the Satraps were persons οἵτινες ἄρξουσιν τῶν ἐνοικούντων (Pott. *Etym. Forsch.* I. LXVIII). Here *ksh* is represented by *s* only; comp. *sex* with *kshaksh*. In Ὀξάθρης, (Diod. XVII. 34. Plut. *Artax.* c. 1) the Persian *ksathra* is exactly preserved. The *o* is to be explained like the first syllable of Otanes, which, according to Pott (*Etym. Forsch.* I. p. xxxv) is equivalent to the Sanscrit *su-tanu* "having a beautiful body," (*su* = *ev*; *tan* = "body" in modern Persian) the *s* being omitted as in Ἰνδός from Sindhu. In the root *kship* "to throw," the initial guttural is left out in the Latin equivalent *sip-* (*in-sipere* = *injicere*, *dis-sip-are* = *disjicere*), but in the Greek ῥίπ-τειν, anciently *ῤρίπ-τειν* as appears from ἐρείπ-ειν (Pott. *Etym. Forsch.* I. 257. II. 167), we have *ρ* substituted for *sh*. (3) The following instances, in which the Sanscrit *ksh* is represented by *cr* in Greek or Latin, have been pointed out Rosen (*Journal of Education*, viii. p. 345): *kshapâ* "night," Zend *ksafna*, *ksafne*, *ksapanem*, Persian *shab*, correspond to the Latin *crepusculum*; *kshura* "the hoof of an animal," to the Latin *crus* (*crur-is*); and *kshipra* "swift," "quick," to the Greek κραιπνός. From (1) we see how the last letter of ἔξ, *sex* is related to the

last letter of *kshaksh* : from (2) how the *s* of *sex* corresponds to the initial *ksh* ; and from (3) that either the initial or final *ksh* may be a representative of $\kappa\rho$, *cr*. Now we have before suggested that one form of the number “three” might be produced by adding to the second pronominal element, the particle *ra*. We think, therefore, that *ksh*, in the number “six,” stands for the combination *ka-ra* denoting “three.”

It appears then, upon the whole, very probable that seven of the first ten numerals may be traced to the three primitive pronominal elements. The numerals five, nine, and ten cannot be derived from the same source. Although the duodecimal system of notation was forced upon the notice of man by prominent and ever-recurring objects, it must not be forgotten that there was still another mode of counting no less obvious and necessary. We mean the decimal notation suggested by the number of the fingers and toes. That this system of notation should be mixed up with the duodecimal, in suggesting the names of the numerals, is natural enough, and we see such a mixture in the fact that the Romans had two years, one of twelve months and the other of ten. One would fancy, indeed, without any particular investigation into the subject, that the number five would have some connexion with the word signifying a hand, and the number ten with a word denoting the right hand, for in counting with our fingers we begin with the little finger of the left hand and so on till we get to the little finger of the right hand. In Greek and Latin, especially, it is impossible to overlook the resemblance of $\delta\acute{\epsilon}\kappa$ -*a*, *dec-em* to $\delta\acute{\epsilon}\kappa$ -*σιος*, *dec-s-ter*. The arguments for this very natural supposition have been lately put in a very clear way, by an ingenious writer on the continent¹, and, as we think they are conclusive, we shall give them in the author’s words. We must premise that the Sanscrit numerals, five and ten, are *pan-chan* and *daça(n)*, and that, from a comparison of *pancha(n)* with $\pi\acute{\epsilon}\mu$ - $\pi\epsilon$ and *quin-qve*, as well as from the analogies pointed out in the last chapter, it is highly probable that the element of the number five is *qvam*, which would become *çvam* in Sanscrit.

“It is not difficult to perceive,” says our author², “that this same stem recurs in the number 10 of the Indo-Germanic

1. Dr Richard Lepsius, *Zwei Sprachvergleichende Abhandlungen*. Berlin, 1836.

2. p. 116.

languages; it appears most entire in the Latin *de-cem*. The final *m*, which has fallen off in the nominative of the Sanscrit and Zend *da-ça*, appears still in the ordinals, and therefore may be supposed in the original form of the Greek *δέκα*. In the Gothic *taíhun*, the *k* is changed into *h* according to the usual law: in this it differs from the form admitted in *fimf*, without, however, justifying any doubt as to the identity of the two forms. Moreover, we find the Gothic form *hun*, with an addition of *d* (see Grimm II. p. 231, 232), in the compounds *sibun-téhund*, 70; *ahtau-téhund*, 80; *niun-téhund*, 90; in which we find *téhund* as an equivalent to *taíhun*. Indeed both forms are combined in *taíhun-téhund* = $10 \times 10 = 100$, and it is not till the combinations which follow, *tva-hunda*, 200; *thrija-hunda*, 300; &c., that we find the simple form *hunda*, in which of course we must recognize the same stem as in *taí-hun* and *téhund*. It is certain, from a mere comparison, that *hunda* is again found in *centum*, *tva-hunda*, in *du-centi*, &c. The radical *m* or *n* is thrown out, as is frequently the case before *t*, in the Sanscrit *çata*, for which we also find *éka-çata* (compare *έκατόν*). We have seen *hunda* used in the formation of the tens; so also we find *centum* in *(d)vi-ginti*, *tri-ginta*, &c.; and although the *n* has fallen out in the Greek *έκατόν*, it is preserved in *τρία-κοντα*, *τεσσαρά-κοντα*; it has fallen out only in *(δF)είκατι*; the ordinary Attic form *είκοσι* has gone still further and has softened *t* into *s*; so also in *δια-κόσ-ιοι*, *τρια-κόσ-ιοι* (comp. the Boeot. *δια-κάτ-ιοι*, &c.), and in the Latin ordinals *vi-ces-imus*, *tri-ces-imus*. In these, therefore, the same stem appears as *kos* and *ces*. In Sanscrit the *n* is quite dropt in the tens also: *vin-çati*, 20; the three following have lost the *i* also: *trin-çat*, 30; *chatvârin-çat*, 40; *pancha-çat*, 50; in the following *çati* loses its first syllable, and *ti*, originally nothing but an affix, alone remains: *shash-ti*, 60; *sapta-ti*, 70; *açî-ti*, 80; *nava-ti*, 90. It is much the same in Zend, except that 30, 40, 50 are formed with *-çata*, instead of *-çat*; those which follow however also take *-ti*. With regard to the Gothic we have only the additional remark to make, that we find in the first four tens *tvai-tigus*, *thrija-tigus*, *fidvôr-tigus*, *fimf-tigus* a third form *gus* of the same stem: this comes very near the Greek *kos*, and has besides retained the softened guttural instead of the *h*. Thus we find in the Gothic the remarkable phenomenon of one

and the same stem, which is written *fim* in 5: *hun* in 10 and the higher *tens*, and *gu(n)* in the lower tens: and it is the business of definitive, and, at the same time, extensive comparisons, like those which are possible in the numerals, to establish such facts as must necessarily be exposed to objections, when the investigation is confined within the limits of a single language.

“How then are we to interpret this widely diffused stem, which we see recurring in the 5, the tens, and hundreds of all Indo-Germanic languages? We observe that this stem contains precisely the most essential numbers of the decimal system. In general, how have mankind arrived at the decimal system, which is so inconvenient for all minute reckoning, and especially for division? and yet the earlier the period, the less was the occasion for large numbers, in which the fundamental system becomes identical. Finally, why did they not go back to the number 5, the lowest basis of the decimal system? We find both systems together among the aborigines of America, as well as among the most polished nations of all ages. Whence came this decimal system which has every where taken its place by the side of the far more natural duodecimal system? From what else but from the 10 *fingers of the two hands*, on which every child at the present day begins to count.

“In this simple consideration we must be struck with the surprising resemblance between *hundā* and *handus*, the hand, in Gothic: in fact a narrow scrutiny of both stems, which we will now attempt, will easily convince us that this similarity is not merely external and accidental, but that the two words are etymologically one and the same.

“*Handus* is immediately connected with *hinthan*, *capere*¹, which we also find in the isolated, and, I might almost say, Germanized form *pre-hendo*. Grimm (*Gr.* II. p. 35) is quite right in also referring to this stem *hund-s*, *canis*, the catcher, *qui capit feras*. In this too we see that in the whole stem *d* is really nothing but an affix, of which Grimm (II. p. 231. foll.) has very fully treated: for *hund-s*, with the usual changes, but without *d*, is found in the Greek *κυν-ός*, Latin *can-is*, Sanscrit *çvan* (gen. abl. *çunas*, dat. *çun-ê*, instrum. *çun-â*, locat. *çuni*, nom. *çvâ*, accus. *çvân-am*). We find the same stem in the Homeric form

1. *Hente*, which so often occurs in Chaucer, is the same word.

γέν-το δ' ἰμάσθλην, which points to an ancient form γέν-ειν, instead of ἐλεῖν¹. As *hund-s*, *canis*, refers to the stem *hun*, Greek *κυν*, Latin *can*, similarly we may trace also *hunda*, *centum*, to the stem *hun*, Latin *cen*, Greek *κορ*. Consequently, both stems are identical even in this form. An *u* in a stem as in *hund*, *κυνός*, often points to an original *v*, which in this case brings us nearer to the stem *kvan*. In fact we still find both consonants in the Sanscrit *çvan*, dog, Zend *çpan*²; we must therefore in the case of *canis* also suppose an older form *qvanis*. Just so the stem of the number 5 was originally *kvam*; only in this word the *m* is still preserved, as might be established by certain forms (*πέμπε*, *fimf*), though in most words expressing this numeral the *m* has been softened into *n*. This *m* is probably a softening of *p*, which we still find in *cap-ere*, the connexion of which with *can-is* is as certain as that of *hinthan* with *hunds*. Lastly, we find the same stem in the Hebrew *gôm-ex*, 'the full hand,' *gâmaç*, 'to take,' *kaf*, 'the hand,' and in the Coptic *'gop* (*capere*) whence comes *'gig*, 'the hand.'

"So much for the stem from which *hunda* and *handus* are derived. It appears to me fully established, that, in all the languages referred to, the number 5 was expressed by the hand with its 5 fingers, and was thus made the simplest and most obvious basis of the old system of numeration. The Greek word *πεμπαΐζειν* means what we call 'counting on the fingers.' It was possible, however, when the one hand was finished to go on with the other, and thus a higher unity was naturally made of the number 10, so that instead of the quinary scale which

1. "Buttmann is unquestionably right in comparing γέν-το immediately with ἔλετο, just as the Æolic form κέντο for κέλετο is adduced from Alcman. It is this transition from *n* to *l* which prevents us from recognizing the stem *hinthan* in the Greek language. We find the same stem with *r* for *l* in the Sanscrit *hri* (*capere*), to which belong *hasta* (*manus*) (See Burnouf *Yaçna*. Tom. I. p. LXXXI, and note A), Latin *hir*, Greek *χείρ* and *αἰρέειν*, also, with an addition of *p*, *κάρ-πος* (the wrist), *carpus*, *ἀρ-πάζειν*, Gothic *hreiban*, *greifen* (See Grimm II. p. 45), nay, as it appears, also in the Sanscrit *kara* (*manus*), and consequently the whole wide-extended stem *kri*, the general signification

of which (*facere*) cannot be the original one. The stem *hri*, as we must infer from the letter *h*, which is always a later one, cannot represent an original form, but we must always seek for this in *kri*, which therefore corresponds to *kri*, *facere*. 'That which is identical as far as the letters are concerned cannot be diverse as concerns the meaning' (See Grimm II. p. 76 foll.). The stem of *manus* is different, though it is probably connected with the Sanscrit *pāni*, the hand, and with the Greek *μην-ύω*, *mon-stro*."

2. "See Burnouf: *Yaçna* I. p. LXXII. and comp. Herodotus I. 110: τὴν γὰρ κύνα σπάκα καλέουσι Μῆδοι."

is still in use among some nations, they formed a scale of which the radix was 10. There are still people in America who count with their feet, and have thus arrived at a higher radix of 20¹.

“It is clear that, if the principle of continued composition of the same elements was applied to the higher numbers, it would soon lead to forms of intolerable length. Even the simple numbers up to 10 are abridged and mutilated in a most violent manner. We should expect to find the same in the higher numbers formed on the digit system, though in Gothic we may still point out this system in almost its original completeness, for in this language the outward similarity of *hunda* and *handus* seems to have preserved the feeling of their identity for the longest period, while in other languages this feeling was sooner lost because they had no form for *handus* so similar to that for 100.

“In the number 5 we find not only no mutilation but even a reduplication of the stem². The Latin is the only language in which we find traces of the simple stem, namely in *quim-atús*, *quin-i*, *quin-io*, *quin-arius*, *quin-decim*, *quin-genti*, &c.: perhaps also in the old Norse *fimm*, Danish and Swedish *fem* (See Grimm. i. p. 762), unless these forms have arisen from a mutilation which seems to be indicated by the doubled *m* in the old Norse.

“In *taíhun*, 10, we easily recognize *tvaí* with an omission of the *v*: ‘two hands.’ Just so in *da-çan*, *de-cem*, *δέ-κα*.

“In *tvái-ti-gus*, 20, twice two hands, the first *tvái* is still entire; *ti* is a still further mutilation of the *tai* in *tai-hun*. We find that in the other languages even this *ti* has fallen out. Instead of (d) *vi-çati*, we ought to have (d) *vi-da-çati* from *da-ça*, instead of *dvi-ginti*: *dvi-de-ginti*, instead of *εί-κατι*: *εί-δέκατι*.

1. “*Voyage de Humboldt et Bonpland, Ière Partie. à Paris, 1810. p. 193.*”

2. Bopp and Benary think that the last syllable of the numeral five in Sanscrit, Latin, and Greek, is the copulative conjunction, and that the nasal, which, in Sanscrit and Zend, appears at the end of this numeral, is a later excrescence. Bopp (*Vergl. Gramm. p. 443*) considers *pan'-cha* as signifying “and one,” the first syllable being the neuter form of *pa* which appears as the number “one.” Benary remarks

(*Berl. Jahrb. July 1833, p. 48*), that *pan'-cha* is easily explicable as a mutilation of *pân'i-cha* “and the hand,” because with this number they began to count with the other hand, and he thinks this derivation confirmed by a comparison of *pan'-cha*, *quin-que*, and *πέν-τε*, the last syllable in each being the regular conjunction in each language. This last suggestion is not to be despised, but if the termination of these words is the conjunction, it implies simply that after counting four the whole hand was opened and held up.

“The same relation remains in *thrija-ti-gus*, 3 times 2 hands, *fidvôr-ti-gus*, 4 times 2 hands, *sibun-tê-hund*, 7 times 2 hands, &c.

“In Gothic the number 100 is written at full length *taî-hun-tê-hund*, 2 hands × 2 hands. But this exactness does not extend farther in Gothic; instead of the difficult composition *taîhun têhund*, the following hundreds return to the simple stem, and we have *tva-hunda*, 200, instead of *tvái-ti-gus têhund*. In the other languages, as also in the later dialects of the German language, the simple stem is put for 100, and only distinguished by the ending, so that *ἐκατὸν* properly signifies ‘one hand,’ and as far as the letters are concerned, *du-centi* and *dvi-ginti* are perfectly identical, and denote 2 hands, just as *tai-hun* does¹.

1. “Grimm (Gr. II. p. 17), is perfectly right in connecting the following words: Gothic *teihan* (*nuntiare, dicere*), old High German *zihan* (*accusare*), *zeigôn* (*indicare*), *zêha* (*digitus, i. e. index*); Gothic *taîhun*, old High German *zêhan* (*decem*), Gothic *tigus* (*decas, numerus index*), &c. A confirmation of this will appear in the following developement.

“In counting with the fingers one naturally begins with the left hand and so goes on to the right. This may explain why in different languages the words for *the left* refer to the root of *five*, those for *the right* to the root of *ten*, and why expressions like *finger, fangen, zeigen, zählen*, refer sometimes to 5, and at other times to 10. To omit any strict developement of the ideas,—that there is a connexion between 10 (the second hand) and *the right hand*, appears from the words: Sanscrit *da-ça—dak-sha, dak-shina*; *δέκα—δέκ-σιος*; *decem—dec-ster*; Gothic *taîhun—taîh-s-vô* (on the derivation in *vô*, see Grimm. II. p. 189), old High German *zêhan—zesō, ze-se-wa*, old High German *zeswe* (*dexter*). All the languages have also formed from this a distinct feminine substantive, to signify, the right hand. This transition to the idea of the right hand will enable us to understand how the ideas of pointing, taking, directing, could proceed from the same root: Sanscrit *diç* (*monstrare*), *δείκ-νυμι, δέκ-ομαι, dic-ere, in-dicare, in-dec-s, dig-nus*, &c. Gothic *teihan* (*accusare*), *zeig-ôn* (*monstrare*). Let it be observed here, how these verbal roots preserve, by these abbreviation, an ap-

pearance of simplicity and originality which by no means belongs to them: this is a phenomenon of frequent occurrence, which has been hitherto but little attended to. Language, like the Indian fig-tree, lets its branches sink into the ground again, all round its root, and these strike root again and become new stems, like the old one, whose relative originality can only be estimated according to the degree of their removal from the common middle-point. From *δέκα* is further derived *δάκ-τ-υλος*, from *decem dig-it-us*, and from *zêhan, zêha* (the toe). Lastly, we refer to *taî-hun*, old High German *zêhan*, also old Norse *ta-la* (instead of *tahi-la*), old High German *za-la, zähl* (number) *zalôn, zählen* (to count), just as *πεμπαζειν* comes, though with still greater clearness, from *πέμπε* (5), and just as the Sanscrit *çâtai* (*numerare*) is derived from *çata* (100).

“We pass on to the stem of 5. As *dec-ster*, with a formation in *st*, refers to *decem*, the old High German *vin-star* (*sinister*), with the same formation (Grimm. II. p. 297), refers to *vin-f* (Gothic *fin-strs* ? to *fin-f*). We find the same stem in the Sanscrit *vâm-as* (*sinister*), which refers to the stem of *pan-cha*n with a softening of the *p*. The Latin *sin-ister* takes an *s*, which is a deviation, but there is an instance of the same transition in *sim-plex, sin-gulus, sem-el*, nay we have an immediate interchange of *v* and *s* in the Sanscrit *vinâ*, Latin *sine*, although perhaps we must here infer an earlier *sv*, or original *kv*, as in the stem we are discussing:

we

“Lastly, in Gothic the word *thūsundi*, 1000, seems to refer to this stem, and appears to be composed, how we know not, of *taihun hundi*¹.

“I subjoin here the explanation of the Indo-Germanic expression for 9, which is also, I think, though not so distinctly, derivable from the stem *kvam*. It has here, as in *πέμ-πε*, *fimf*, old High German *vimf*, thrown off the *k*, and appears as *vam*. We start here from the Greek *έννέα*, which stands for *έν-νέFαμ*, as we see from *novem*, *navan*, *niun*. The Greek form is distinguished by the prefix *έν-*, which is wanting in the other languages. In this we are immediately reminded of *έκατόν*, which appears more entire in the Sanscrit *ékaçata*, ‘one hundred.’ There is a form *ékôna* or *-ûna* peculiar to the Sanscrit, (originally it was *éka vinâ*, ‘one without,’ ‘one less’), which subtracts one from the number which follows: *ékôna vinçati* or *ûna vinçati*, 19. Similarly, there might have been an *ékôna daçan*, or *ûna daçan*, for 9; the *da* fell out, as in *vinçati* for *vin-da-çati*, and there remained *ékôna-kan* or *ékônavan*, which corresponds to the Greek *έννέFav*, or *ûnavan*, which by dropping the *û* becomes *navan*, *novem* and *niun*.”

we cannot imagine an immediate interchange. Finally, there is no other way of explaining the word *ἀρίστερος*, which stands so isolated in the Greek language, than by supposing *Fαριστερός* = *vin-ster*, with a change of *n* into *r*. We have above recognized the same stem in *hn* and *hr*, and the interchange of the liquids is sufficiently well known. Consequently, the word *ἀρι-θμός*, hitherto referred to *άρω* (on the derivation in *-θμος*, see Buttmann, II. p. 315), *ἀρι-θμεῖν* = *πεμπάζειν*, must belong to this root, and must be connected with *ἀρι-στερός*, as *χα-λόν* is with *χῆ-so*. It must be confessed, that no traces of a digamma are now traceable in *ἀρίστερος* or *ἀριθμός*, but this proves nothing against the former existence of that letter in this, as in other words. We obtain therefore the following table of the expressions for left and right.

<i>πέμ-πε.</i>	<i>δέκα.</i>
<i>vâm-as,</i>	<i>dak-shas,</i>
<i>vin-s-tar,</i>	<i>taih-s-vô,</i>
<i>sin-is-ter,</i>	<i>déc-s-ter,</i>
<i>Fαρ-ισ-τερός.</i>	<i>δεκ-σί-τερος</i> (Hom.)

The notions of pointing, receiving, &c. are, as we might expect, not to be found in the stems for five and ‘left:’ but the finger belongs to the left hand as well as to the right, and while *δάκ-τυλος* and *dig-itus* refer to *δέκα* and *decem*, the Gothic *figgrs*, old High German *vin-kar*, refer to *fimf* and *vinf*. The formation in *k* (comp. Gothic *juggs*, old High German *jun-i* with *jun-ior*, *stren-ki*, *stren-ge*, *strong*, with *stren-uus*, &c. Grimm. II. p. 287 foll.) shows itself in the verb *fin-gan*, *fan-gen* (Gr. II. p. 60 nr. 603; I. p. 1023 nr. 18), and *fin-gan* (*capere*) bears the same relation to *fig-grs* that *hin-than* (*capere*) does to *han-dus*.”

1. “Just as there is a break after *taihun tēhund* and a return to the simple *hunda*, the Romans, when they got beyond 100,000 in their money reckonings, left out this sum and said only *decies æris*, instead of *decies centena millia æris*, and 1 *sestertium* was in the reckoning equivalent to 1000 *sestertii*, when it was joined to *decem*, *undecim*, &c., and to 100,000 *sestertii*, when connected with *decies*, *undecies*, &c.”

This disquisition anticipates all that remained to be said on the tens and hundreds.

The words χίλιοι, 1000, and μύριοι, 10,000, are merely expressions for large but indefinite numbers. The connexion of χίλιοι with χιλός, "a heap of fodder", is self-evident: and it is equally clear that χιλός is connected with χέω (χέFω) just as χεῖλος is with χάω (χάFω) and καυλός with καίω, κάFω, καύω. That it has nothing to do with the χλοή, χλωρός, &c. as Pott supposes (*Etym. Forsch.* i. p. 141) is shown by the length of the first syllable. The intimate relationship in meaning which subsists between χέω and χιλός will be felt by any one who reads such passages as *Odyss.* xi. 588. δένδρεα δ' ὑψιπέτηλα κατὰκρηθεν χέε καρπόν. The same is the case with μύριοι, which, with a difference of accentuation, is used in the best writers in a general and indefinite sense. Thus we have μάλα μυρίοι, "a great many", μυρία σπουδή, "excessive eagerness." (See Buttm. *Ausführl Sprl.* § 70. *Anm.* 15). This word is connected with μύρω, a verb which expresses the falling of water, and is especially applied to a flood of tears. Compare Hesiod, Ἄσπ. Ἡρακλ. 132. πρόσθεν μὲν θάνατόν τ' εἶχον καὶ δάκρυσι μῦρον, with Soph. *Æd. Col.* 1253. δι' ὄμματος ἀστακτὶ λείβων δάκρυον. The derivation of the idea of a large number from the sight of water falling in infinite drops is too obvious to require any remark.

We must now turn to the ordinals, and, in discussing them, we will include an inquiry into the modes of expressing a superlative common to the Greek and cognate languages, an inquiry which might indeed be postponed to the third book, but which may be conveniently discussed in this chapter as the comparatives have also been touched on here, and as this will give us an opportunity of explaining three words intimately connected with the numerals, μέσος, ἡμισυ, and ἄλλος.

It has been mentioned that the ordinal of the second number is δεύτερος, and it will be observed that this word contains the comparative suffix -τερος explained above. This comparative suffix is, as we have seen, from its origin peculiarly adapted to the expression of a relation between *two* persons or things, especially of the relation between *farther* and *nearer*. Hence, the ordinal of the number two would naturally be expressed by affixing to that numeral this comparative termination, for in that

case a relation between two only is implied. But when the relation of nearness is applied to one out of a greater number, we find that a different termination is affixed, and δέυ-τατος is the word used for expressing the nearest of one out of a given series, that is, "the last," considering them as in a state of motion from the *terminus in quo*. Now the ending -τατος is the most common of those which are used to express the superlative degree in Greek. This form points at once to a reduplication, and would lead us to suppose that there must have been at some time a superlative form in -τος only. The ordinals in the common Greek writers are πρῶτος (or πρότερος when only two are spoken of), δεύτερος (or δεύτερατος, when more than two are spoken of), τρίτος, τέταρτος, πέμπτος, ἕκτος, ἑβδόμος, ὀγδοός (or ὀγδοῖος, as the analogy of the Latin *octavus* would lead us to infer), ἑννατος, δέκατος, &c., εἰκοστός, &c., ἑκατοστός, διακοσιοστός, &c. χιλιοστός, μυριοστός. Now in all these, except ἑβδο-μος, ὀγδο-ος=ογδοῖος, (the forms *octavus*, ὀγδοῖος are to be explained from the final *u* of the Sanscrit dual) the termination is τος. The same termination is found in the Sanscrit *chaturthas*, *shash-thas*, and in the Latin *quartus*, *quinctus*, *sextus*; all the other Latin ordinals except *secundus* (which is merely the participle of *sequor*), *octavus*, and *nonus* (for *novimus*), end in *mus*, an equivalent to which is found in the Sanscrit *panca-mas*, *sapta-mas*, *ashta-mas*, *nava-mas*, *daça-mas*. As *μος* and *τος* can have no connexion with one another, we must conclude that they are both allowable forms of the ordinal termination. They both imply that the thing specified is the last of a series going on from the speaker. The syllables *μος*, *mus*, *mas* contain the element *με* of the first personal pronoun. The syllables *τος*, *tus*, *thas*, as Bopp has properly observed (*Vergl. Gramm.* p. 393), imply motion from a place, and the Latin termination *tus* is constantly found in that sense, as in *cæli-tus*, "from heaven", *sub-tus*, "from under", *in-tus*, "from within". The common Sanscrit terminations for the comparative and superlative are *-tara*, *-tama* (Latin *-timus*), which are sometimes written *-dhara*, *-dhama*, as in *a-dhara*, "the lower", *a-dhama*, "the lowest". We have also the synonyms *a-dhas* and *a-tas*, between which stands our termination *-thas* with the same meaning. This termination is found directly in Greek in such words as ἔν-τος (*intus*), νόσ-τος, "from afar", &c. But the more usual form in which it appears

is *θεν* (= *θες*, Bopp, *Vergl. Gramm.* p. 250), which bears much the same relation to *τος* that we have seen in the Sanscrit forms *-dhas*, *-tas*. Now the meanings of these terminations all apply equally well to the ordinals or superlatives, whether we consider them as indicating generally separation or removal, or as denoting motion from the subject. Thus also the termination applies very well to such words as *έκασ-τος*, “the very one”, “the one by himself”, which is formed as a superlative from *έκας*. If these remarks be well founded, then *-τος* must be the proper form of the superlative, and *τατος* merely a reduplication of it, just as we have both *τρί-τατος* and *τρί-τος*. The force of this termination perhaps appears most evident in the word *πολλοστός*, which means “one taken out of many”, and hence, by a very natural transition, “very small”; for, when a given whole is divided into many units, the smallness of the unit will of course depend on the number of them. The word also signifies “the last of a long series”, as in Aristoph. *Pax*, 559,

ἀσπάσασθαι θυμὸς ἡμῖν ἐστὶ πολλοστῷ χρόνῳ,

i. e. “after so long a time”, “in the last of so long a series of years”. These meanings arise naturally from the signification which we have given to the affix, and we do not know of any other means of explaining the word. We have also a very striking proof of the correctness of this view in the ordinary use of the superlative in Greek, where we should expect a comparative according to our idiom. Thus we have in *Æschylus* (*Persæ*, 180), *έδοξάτην μοι δύο γυναῖκ' εὐείμονε—εἰς ὅψιν μολεῖν—μεγέθει τῶν νῦν εὐπρεπεστάτα πόλιν*, where these two visionary women are supposed to be the first of a series including all the actually existing women, with whom they certainly would not be classed were there not something in the nature of a Greek superlative which renders a construction like this necessary. The same also appears from the common Greek idiom *πεμπτὸς αὐτός*, “with four others”, &c.

Although the Greeks generally expressed the comparative and superlative by *-τε-ρος* and *-τα-τος* or *-τος*, there was another method which they adopted most frequently in the case of dissyllabic adjectives terminating in *-ρος* or *-υς*. This was by affixing the termination *-ιων* for the comparative and *-ισ-τος* for the superlative. The quantity of *-ιων* is variable, the first syllable being

short in the old epic poets, and long afterwards; in this variable-ness it stands between the analogous Sanscrit terminations *-îyas*, *-îyâns*, and the Latin *-ior*, one of which has the first syllable long, and the other always short. Some of the comparatives thus formed admit of an anomalous contraction, which requires some notice. Thus *ταχύς* makes comp. *ταχίων*, superl. *τάχιστος*, but *ταχίων* is often contracted into *θάσσω*, neut. *θᾶσσον*. Similarly *βαθύς* makes *βάσσω*; *βραδύς*, *βράσσω*; *γλυκύς*, *γλύσσω*; *μακρός*, *μάσσω*; *παχύς*, *πάσσω*. To these may be added *ᾄσσω* from *ἄγχι*, and *μᾶλλον* from *μάλα*. In all these cases there has been a process of assimilation, like that which has taken place in the barytone verbs in *-σσω*¹. In the case of *θάσσω*, *γλύσσω*, *μάσσω*, and *πάσσω*, there has been an assibilation of the *κ* sound, the aspirate in the first word being transferred from the end to the beginning of the syllable, according to a principle before explained. The second letter in all these words is a representative of the *ι*, as is also the case in *ἄλλος*, *alius*, *μέσσος*, *medius*, *φῦλλον*, *folium*. From the accentuation of *ᾄσσω*, *θᾶσσον*, and *μᾶλλον*, it may be inferred that in Attic at least the first vowel is long by nature, and it may be doubted whether these words ought not to have the *iota subscriptum*, the *i* being transferred to the first from the second syllable, as is indeed clearly the case in *κρείσσω*, *μείζων*.

To ascertain the meaning of this comparative suffix, we must recur to what was said in the last chapter on the connexion of the Greek and Sanscrit terminations—*-ιος*, *îya*. It appears that these endings express a quality or relation, and so differ from the comparative-ending only in this, that the comparative properly denotes a relation between two only, whereas these terminations express a relation generally. There is reason, therefore, to believe that the terminations are only weaker forms of the comparative ending in *-ίων*, just as the terminations of *med-ius*, *al-ius*, clearly relative words, are only slight variations of the comparative-endings in *-ior* (more anciently *-ios*), neuter *-ius*.

The word *medius* is perfectly analogous to *ἴδιος*; the first syllable of *medius* is the first personal pronoun, just as the first syllable of *ἴδιος* is the third. The word “middle” expresses that the subject, the *here*, is considered as equidistant from two

1. See Book III. Chap. 1, and Book IV. Chap. 4.

other localities, and is therefore properly expressed by a variety of the first personal possessive pronoun. This possessive in Sanscrit is written *madîya*, the word signifying "middle" is *madhya*. In Greek the *dh* or *th* of the Sanscrit is assibilated into σ , as $\sigma\acute{\iota}\omicron\varsigma$ from $\theta\epsilon\acute{o}\varsigma$, and the *i* or *y* is represented by the second σ of $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$, an assimilation which we often find. We do not hesitate to recognize this word in the second part of $\eta\text{-}\mu\iota\sigma\upsilon$. The first part bears the same relation to $\delta\acute{\iota}\alpha$, Latin *di* (*di-midius* "through the middle"), that the first syllable of $\upsilon\text{-}\mu\epsilon\acute{\iota}\varsigma$ does to $\delta\acute{\upsilon}\omicron$. The same preposition also appears in the first syllable of $\eta\text{-}\mu\acute{\epsilon}\rho\alpha$ and $\eta\text{-}\mu\epsilon\rho\omicron\varsigma$ ¹. By an assimilation very like that which has taken place in $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$ for $\mu\acute{\epsilon}\delta\iota\omicron\varsigma$, we have $\acute{\alpha}\lambda\lambda\omicron\varsigma$ for $\acute{\alpha}\lambda\iota\omicron\varsigma$, with the same ending signifying quality or relation. It is clearly the same word with the Sanscrit *anya* (for *anîya*, from *ana* the demonstrative) and the Latin *alius*. The interchange of the liquids *l*, *n*, in Greek and Sanscrit is well known; it is also common among the dialectical varieties of the Greek language itself (Buttmann, *Ausf. Sprachl.* Vol. I. p. 74). In $\acute{\alpha}\lambda\lambda\eta\lambda\omega\nu$ (from $\acute{\alpha}\lambda\lambda\omicron\iota$, $\acute{\alpha}\lambda\lambda\omega\nu$) one of the λ 's is absorbed in the long vowel, just as the *i* is omitted in *sōlus* formed from the separative particle *se* and *alius*. The Sanscrit synonym *anyōnya* = *anya-anya* is melted down into one word in a somewhat similar manner.

It may be objected to this resolution of $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$ and $\acute{\alpha}\lambda\lambda\omicron\varsigma$ into forms so analogous to the qualitative ending in $-\iota\omicron\varsigma$ on the one hand, and the comparative in $-\acute{\iota}\omega\nu$ on the other, that there is actually a form of $\acute{\alpha}\lambda\lambda\omicron\varsigma$ ($\acute{\alpha}\lambda\lambda\omicron\iota\omicron\varsigma$) ending with the former affix, and a comparative of $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$ - $\mu\epsilon\sigma\alpha\acute{\iota}\tau\epsilon\rho\omicron\varsigma$ (superl. $\mu\epsilon\sigma\alpha\acute{\iota}\tau\alpha\tau\omicron\varsigma$). With regard to $\acute{\alpha}\lambda\lambda\omicron\iota\omicron\varsigma$ we have only to say that a reduplication of the ending would be quite in accordance with the analogy of the Greek language, even though we were not entitled to suppose that this elongation took place after the word had, by assimilation, lost the outward features of its original form. In Sanscrit *an-ya* and *an-ya-tara* are synonyms for "other," "different." The same may be said of $\mu\epsilon\sigma\alpha\acute{\iota}\tau\epsilon\rho\omicron\varsigma$: for although $\mu\acute{\epsilon}\sigma\iota\omicron\varsigma$, *medius*, have unquestionably a comparative meaning, yet in the general use of the word, it may have become necessary to have a separate form to express more strongly that one of two objects was nearer to the middle point than the other. In

1. Above, p. 181.

Sanscrit *madhya* has a superlative *madhyama* like the Latin *mediocrimus*. We have before remarked on the connexion of ἴσος and ἴδιος, which are both analogous in meaning, as the latter is in form also to μέσος (μέδιος). It is observable that ἴσος has a comparative ἰσαίτερος, and ἴδιος a comparative ἰδιαίτερος. The former might be explained by the existence of the word ἰσαῖος (the name of the orator) which bears the same relation to ἴσος that τριταῖος, &c. do to τρίτος, &c. But we are inclined to believe with Buttmann (*Ausführl. Sprachl.* § 65, 5. *Anm.* 6), that the particular form of a comparative was often chosen by the speaker or writer arbitrarily and to suit his own ear. Thus we have from ἄσμενος, a perfect passive participle, ἄσμενώτερος, ἄσμεναίτατα, and ἄσμενέστατα.

It has been mentioned that when the Greeks formed the comparative in -ίων, they employed a superlative in -ιστος. Similarly, in Sanscrit a superlative in -isht'h'as corresponds to a comparative in -īyans or īyas. It will be worth our while to examine these forms a little more minutely. Most of the Greek, and many of the Sanscrit, adjectives, which form their comparatives and superlatives in this manner, end in -us or -r(^o)-s. Why the former should prefer this method it is difficult to say, but one may easily see why the latter, which already contain part of the ordinary comparative-ending, should repudiate the common termination. Those Greek adjectives which already end in -πος, and those Sanscrit adjectives which have this or any other consonant-suffix, drop it in the comparative, which is formed as if from an adjective in -us. Thus, αἰσχ-ρός makes αἰσχ-ίων, ἐχθ-ρός, ἐχθ-ίων, &c. In Sanscrit the vowel of the new positive is always affected by *guna*: thus, *kship-ra* "swift" makes *kshép-īyas*; *kshud-ra* "little," *kshôd-īyas*; *dû-ra* "far," *dav-īyas*; *yu-van* "young," *yav-īyas*; *sthû-la* "thick," *sthav-īyas*, &c. We think the long syllable in the penultima of these Greek and Sanscrit comparatives, is occasioned by the coalition of the final vowel *u*, from which they are always formed, with the *i* of the ending. In the words θάσσων, γλύσσων, &c. the final *u* has been elided, and the short *i* as usual changed into *y*, whence the assimilation. There are three instances of a somewhat similar kind in Sanscrit: *pri-ya* "dear," *sthi-ra* "firm," and *sphi-ra* "swollen," form their comparatives by adding -yas to a *guna* of the roots, thus, *prê-yas*, *sthê-yas*, *sphê-yas*. The

reason of this is obvious: for otherwise there would be a concurrence of $\acute{e}iy = eiiy$ which would not be allowable.

In compliance with the custom of all writers on grammar we have talked of a superlative in $\iota\sigma\text{-}\tau\omicron\varsigma$ or *ish-'th'as*. If it were true, as Grimm supposes (*Deutsche Gramm.* III. p. 583), that the superlative is properly formed from the comparative, it would be necessary to infer that these two syllables form the ending of the superlative as such, and that, in the Sanscrit at least, the syllable *ish* was a contraction of $-\acute{i}yas$, and this is Bopp's notion (*Krit. Gramm. der Sanskrita-Sprache*, p. 113). To us it appears quite unnecessary to derive the superlative from the comparative in any case. Nobody will assert that the more common comparative ending $-ta\text{-}ra\text{-}$, $-\tau\epsilon\text{-}\rho\alpha$, is contained in the corresponding superlative; why then should we suppose that the other comparative is? The comparative expresses a relation between two things: one is farther than or beyond the other ($ta\text{-}ra$), or bears a certain qualitative ratio to it ($i\text{-}y\acute{a}n\varsigma$). The superlative expresses that the thing is the last in the series, proceeding from ($-ta$) or nearest to ($-ma$) the subject, or both ($-ta\text{-}ma$). These ideas are surely distinct, and need not be derived from one another. We believe that this superlative-ending $\iota\sigma\text{-}\tau\omicron\varsigma$ is simply the termination $-\tau\omicron\varsigma$, which we have already spoken of, appended to a new shorter form of the positive ending in $-\upsilon\varsigma$. The υ is turned into ι , which probably always followed it in the complete termination $-\upsilon\iota\varsigma$ or *hvis* before the υ was vocalized; thus the Sanscrit root *svid* is represented both by $\acute{\upsilon}\delta\text{-}\omega\rho$ and $i\delta\text{-}\rho\acute{\omega}\varsigma$, *hve*, the root of $\upsilon\acute{\iota}\omicron\varsigma$, appears in $\phi\acute{\upsilon}\text{-}\omega$ and *filius*, $\acute{\epsilon}\mu\omicron\iota = \acute{\epsilon}\mu\epsilon\text{-}\phi\acute{\iota}$, appears as $\acute{\epsilon}\mu\upsilon$ in Boeotian Greek (*Apollon. de pronom.* p. 364), $\text{'O}\acute{\iota}\lambda\epsilon\upsilon\varsigma = \text{F}\acute{\iota}\lambda\epsilon\upsilon\varsigma$ appears as $\text{'I}\lambda\epsilon\upsilon\varsigma$ or $\text{O}\acute{\iota}\lambda\epsilon\upsilon\varsigma$ (*Hermann de emend. Gr. Gr.* 415), &c. Although these forms in $-\upsilon\varsigma$ or $-\upsilon\iota\varsigma$ do not exist, they may be presumed as possible from the analogies pointed out by Buttman (*Ausführl. Sprl.* § 67. *Anm.* 6): namely, by the side of $\mu\alpha\kappa\text{-}\rho\acute{\omicron}\varsigma$, $\alpha\acute{\iota}\sigma\chi\text{-}\rho\acute{\omicron}\varsigma$, and $\nu\epsilon\kappa\text{-}\rho\acute{\omicron}\varsigma$, we have the forms $\mu\eta\kappa\text{-}\acute{\upsilon}\text{-}\nu\omega$ (in which the root-syllable is guna'd as in the Sanscrit superlatives, and in $\mu\acute{\eta}\kappa\iota\sigma\text{-}\tau\omicron\varsigma$, $\mu\acute{\eta}\kappa\omicron\varsigma$), $\alpha\acute{\iota}\sigma\chi\text{-}\acute{\upsilon}\text{-}\nu\eta$, and $\nu\acute{\epsilon}\kappa\upsilon\varsigma$. We do not, however, agree with Buttman in thinking the terminations $-\upsilon\varsigma$ and $-\omicron\varsigma$ as originally the same. On the contrary, the terminations in $-\upsilon\varsigma$, as will hereafter be shown, contain a distinct pronominal addition to the crude form of the word, while in the ending $-\omicron\varsigma$ the

nominative suffix is immediately attached. It is no slight proof of the durability of these suffixes, that Sanscrit words in *-us* or *u* are always represented in Greek by corresponding adjectives in *-us* or substantives in *υ*, thus for the Sanscrit *svādus*, *prīthus*, *urus*, *ācus*, *laghus*, *mṛīdus* and *madhu*, we have the Greek ἡδύς, πλατύς, εὐρύς, ὠκύς, ἐλαχύς, βραδύς and μεθύ. The Sanscrit *bahus* has two Greek representatives, βαθύς and παχύς, just as *ahis* stands between ἔχis and ὄφis, or *han* between φαν (φόν-ος ἐπέφν-ον) and θαν (θάν-ατος, θν-ήσκω) (Benary *Berl. Jahrb.* August, 1834, p. 229). There are cases, in which, as we have seen, the superlative termination is immediately appended to an adjective in *-os* as in πολλος-τός, or to an adverb in *-as*, as in ἕκας-τος the comparative of which, ἐκά-τερος, is formed from the adjective ἕκατος, but these are quite different from the case before us, as may be seen from a comparison of ὀλιγος-τός with ὀλίγισ-τος. The terminations *-τερος*, *-τατος*, are sometimes appended to new forms in *-εύς*, as in λαλίσ-τερος, πτωχίσ-τερος, ἀρπαγίσ-τατος, &c. In fact adjectives, in *-ης* or *ηts* and *-ενts*, and even some in *ων* (*ον-s*), *-ιξ* (*-ικ-s*), regularly form the comparative and superlative in *-έσ-τερος*, *-έσ-τατος*. Nor does the apparent analogy of *magis* favour the derivation of μέγισ-τος from an imaginary comparative μέγis for μεγίων; the comparative of *mag-nus* has suffered all sorts of abbreviations: in *major* the *gi* has become *j* as usual, while *magis* has lost the *u* of the ending: the *g* has become *z* in the Zend *maxista*, and has vanished altogether from the French *mais*. There is no reason whatever why there should not be a form μεγε-ύς, as well as μέγε-θος. On the contrary, the existence of μέγισ-τος is a reason for presuming the existence of μεγεύς, just as we might presume the existence of Ἄρεus, if we did not know it, from the superlative ἄρισ-τος, and as a positive *vasus* has been inferred from the Zend superlative *vahista* (Benary *Berl. Jahrb.* August, 1834, p. 230).

CHAPTER III.

THE PREPOSITIONS.

PREPOSITIONS are pronouns in the strictest sense of the word. They express relations of place, and in their ordinary use are employed to denote the relative positions of visible objects. Grammarians tell us that they *govern* cases, and it is the prevailing practice to arrange them according to the cases which they are said to govern. But this is palpably false: for in all languages which have any inflexions a case may express by itself any relation which the addition of a preposition could give to it, and, in languages, which, like the Sanscrit, have a complete assortment of cases, many relations of place are invariably expressed by the cases without any particle prefixed. Such would have been the fact in the Greek language too, but the rules of euphony, convenience, the influence of writing, and a multitude of other causes, have contributed to mutilate the terminations of the nouns as well as of the verbs, and thus prepositions, the force of which was originally included in the case-endings, have come to be prefixed for the sake of greater distinctness, just as the particular noun is placed after the pronoun, called the article, in repetitions, and just as the nominative case is prefixed to the verb.

There are eighteen Greek words which are commonly reckoned as prepositions; six monosyllables, εἰς, ἐν, ἐξ, πρό, πρὸς, σύν, and twelve dissyllables, ἀμφί, ἀνά, ἀντί, ἀπό, διά, ἐπί, κατά, μετά, παρά, περί, ὑπέρ, ὑπό. We shall consider these according to the relations which they express and not according to any arbitrary division of former grammarians. As the prepositions retain their original meaning, as words indicating positions and directions in space, more characteristically than any other pronominal words, and also present the simplest combinations of the original elements of the pronouns, we will, previously to examining these Greek forms separately and in detail, endeavour to point out their etymological analysis in a sum-

mary manner, and to explain the general principles of their composition. It has been stated before that the primitive pronouns are three in number, expressing respectively the positions *here*, *near to the here*, and *there*, and that different modifications of direction or position may be denoted by combining these original stems with one another or with the particle *la* or *ra*. On examination it will appear that all the Greek prepositions, with the exception of $\delta\iota\acute{\alpha}$ which is a form of the second numeral, are compounds of at least two of the primary elements, or of one of them with *-ra*. After a careful dissection of all the pronominal forms with which we are acquainted, we have arrived at the conclusion, that if any one of the elements of position is combined with *-ra*, it indicates motion and continuation in a direction of which the element in question represents the point nearest to the subject; and that, by subjoining any one of the pronominal elements to any other of them, we denote a motion or continuation from the position denoted by the first element towards that indicated by the second. Thus we have seen, that the second element when prefixed to *-ra* (as in *ka-ra*) expresses motion onwards from the position indicated as *near*, so as in fact, to coincide with a word indicating the third position (*ta*, or even *ta-ra*); and that the first element subjoined to the third (as in *ta-va*) expresses motion or continuation from the third position towards the first, so as to coincide with the second position. We shall find this method most amply illustrated by the Greek prepositions. Of these $\pi\alpha\rho\acute{\alpha}$, $\pi\epsilon\rho\acute{\iota}$, $\pi\rho\acute{o}$, $\pi\rho\acute{o}\text{-}s$, are compounded of the first element and $\rho\alpha$. In the first, which is also written $\pi\alpha\rho\alpha\acute{\iota}$, we find both elements in the simplest form. In the second, in which traces of a heavier-ending still remain, the vowel of the first element has assumed the lighter form ϵ , according to a principle which will be more fully explained hereafter. In $\pi\rho\acute{o}$ and $\pi\rho\acute{o}\text{-}s$, which are in fact one and the same word, another element has been subjoined in the subjective *s*, indicating motion or transitiveness, which we shall see playing an important part as the sign of the nominative case. In consequence of this addition, the root vowel has been dropt before the liquid, and a medium weight given to the vowel of the termination. The forms $\pi\rho\omicron\text{-}\tau\acute{\iota}$, $\pi\omicron\text{-}\tau\acute{\iota}$, also used for $\pi\rho\acute{o}\text{-}s$, are compounds, one of the preposition $\pi\rho\acute{o}$, the other of the simple element of the first pronoun, with the element of the

third; and both, therefore, denote (the former more strongly) motion from the first in the direction of the third position. A similar form is $\mu\epsilon\text{-}\tau\acute{\alpha}$, which signifies "with" as a connexion between the *here* and the *there*, and "after" as denoting an approximation to their union. The third pronoun is subjoined to the second in $\kappa\alpha\text{-}\tau\acute{\alpha}$, as it is to the first in $\mu\epsilon\text{-}\tau\acute{\alpha}$, and the meaning which results is analogous. On comparing $\sigma\upsilon\text{-}\nu$ with the Sanscrit *sa-ma*, we perceive that the first element is here appended to a form of the second; the meaning "with" which results is explicable in much the same way as the similar sense of $\mu\epsilon\text{-}\tau\acute{\alpha}$. If the latter expresses "with" as implying a juncture of the *here* to the *there*, so *sa-ma* may convey the same sort of idea as implying an union of the *near* with the *here*. The prepositions $\upsilon\text{-}\pi\acute{o}$, $\upsilon\text{-}\pi\acute{\epsilon}\rho$ are related as *ta* is to *ta-ra*; the latter expresses a continuance of the direction implied by the former. The first syllable of $\upsilon\text{-}\pi\acute{o}$ is a vocalization of the second pronoun *Fa* or *sva*. In Sanscrit it appears as *u* in *u-pa*, and in Latin as *su* in *su-b*. Of the successive mutilations of this stem from *sva* to *hi*, *i* we have already spoken, and we have also hinted the general tendency of the aspirated labial to vocalize itself into *i* as well as *u*. We shall, therefore, have little difficulty in recognizing it in the Greek υ , the Latin *su*, or even in the Sanscrit *u*. According to this analysis $\upsilon\text{-}\pi\acute{o}$ should signify a direction from the immediately *near* to the *here* and $\upsilon\text{-}\pi\acute{\epsilon}\rho$ a continuation of motion in that direction; we shall see presently that this agrees very well with the common signification as the correlatives "under" and "over." We have endeavoured to explain, in the last chapter but one, how the element *a* (*e*), which appears to be a mutilation of the first personal pronoun, came to have the strong demonstrative sense of distance or separation. It bears this sense most directly in composition with the element *-na*, which has also the same signification. There are three Greek prepositions in which the compound appears:— $\acute{\alpha}\text{-}\nu\acute{\alpha}$, $\epsilon\acute{\iota}\varsigma = \acute{\epsilon}\text{-}\nu\varsigma$ and $\acute{\epsilon}\text{-}\nu$. The idea of farness is strongly conveyed by the first; the last and shortest form conveys simply and explicitly the idea of locality; and in the second this is combined with the idea of motion. The element *a* (*e*) appears in three other prepositions, $\acute{\alpha}\text{-}\pi\acute{o}$, $\acute{\epsilon}\text{-}\pi\acute{\iota}$ and $\acute{\epsilon}\text{-}\xi = \acute{\epsilon}\text{-}\kappa\varsigma$. The lighter vowel is chosen in the two latter because their terminations are heavier. The two former are indicative of a direction from the distant to

the *here*: the latter of motion from the distant to that which is near. The first and third have the cognate meanings "from" and "out of:" that which comes from the distant hitherward comes "from," or, if to an intermediate spot, "out of" it. The signification of ἐπὶ is "upon;" the vowel of its termination, as well as that of περὶ, point to an original expression of locality by way of case-ending. A comparison of ἀπό, ἄψ (ἀ-πόσ), π-ρο, π-ρο-ς, convinces us that both ἀ-πό and π-ρο originally possessed the final *s*, which we have mentioned before as the index of transitiveness. Ἄν-τι and ἀμ-φι are compounds, of which the first part is ἀ-νὰ. The latter part of ἀν-τι is the third element under the locative form -τι, which, it will be remembered, is very different from the corrupted form of the indefinite and interrogative. The termination of ἀμ-φι is a mutilation of the second pronominal stem, which is often used to form the locative or dative case. In Æolic and Doric ἀμ-φι is written ἀμ-πί, but we regard this as merely a dialectical corruption. It is clear from ἀμ-φω = ἀνὰ δύω, that φι for σφι is the more genuine form. A similar but more general corruption has taken place in ἐ-πι, the last syllable of which does not appear to be a case-variation of the ending of ἀ-πό, but a substitute for φι, since in its proper meaning ἐ-πὶ is strictly locative.

We commence our separate examination of the Greek prepositions with εἰς and ἐν, which we believe to have been originally identical, and which express the simplest and most elementary notion of locality—the being *in* a place. In the Sanscrit system of cases there is one which by itself expresses this relation, and therefore it is not to be wondered at that there should be no Sanscrit preposition corresponding to ἐν. Now in the Sanscrit pronouns the termination of this locative case is *i-n*: thus *tasmin*, "in this," *kasmin*, "in what?" *étasmin*, "in the same," *yasmin*, "in what," *sarvasmin*, "in every thing." The pronouns of the first and second person are exceptions: these form their locatives in *i* like the bulk of the Sanscrit nouns¹. Bopp supposes (*Vergl. Gramm.* p. 231) that the termination in *-i-n* is of later origin than that in *-i*, and that the final *n* is merely a ν ἐφελκυστικόν, or an arbitrary addition. We do not believe that ν ἐφελκυστικόν in Greek words is a mere capri-

1. Those Sanscrit nouns which form their locative in *ê* are no variation from the general ending in *i*, for in all those nouns the crude form ends in *a*, and *ê* = *ai*.

cious termination: there is no reason why an *n* should be added, and it is very easy to see, on the contrary, how time might have caused an abbreviation, which is indeed constantly the case, of the ending. Besides, the use of the full termination in old words, like the pronouns in Sanscrit, and its appearance in the Greek and Latin pronouns are to us sufficient proofs of its being the most ancient form of the locative. The Greek pronouns in which this termination is found, are ἐμίν, τεῖν, τίν, ἴν, εἰν, σφίν, φίν, ψίν, ἡμίν, ὑμίν, πρίν, &c. In Latin it is even more extensively used, though in accordance with the genius of the language it is generally changed into *i-m*, except in compounds. *Olim* is obviously the locative of *ille* or *olle*, "in that time." The same appears with regard to the other adverbs of times *quom* and *interim*. *Enim* is the locative of some lost pronoun analogous to the Sanscrit *éna*, and means "in that" = "for", just as *sin* means "in this" = "if", the one pointing to something that has been mentioned, the other to something about to be mentioned. *Enim*, which is related to *nam* just as *tango* does to *contingo* (Bopp *Vergl. Gramm.* p. 534), is a compound word like the Sanscrit *a-na*, *é-na*, *é-ta*, *é-ka*: compare the Greek *ννν*, *νίν*, *νόσφι*, with *κεῖ-νος*, *τῆ-νος*, *ἀ-νά*. The same termination with the same meaning is found in *istim*, *istin-c(e)*, *illim*, *illin-c(e)*, *hin-c(e)*, *intrin-secus*, *extrin-secus*, *quin*, *in-de*, *utrin-de*, *un-de*, *subin-de*, *dein*, &c. The first part of *peren-die*, which as we showed before is formed like the Sanscrit *parédyus*, or *aparédyus*, from a pronominal adjective signifying "other", or "further", and the common word for "a day", exhibits the locative of the adjective very clearly, as does also the Sanscrit equivalent *aparé* = *apara-i*. It is obvious that this termination *-in* or *-en* is identical with the Latin preposition *i-n*, which from the disuse of the locative case is always used to express the simple notion of locality. We cannot identify ἐν with *in*. There is no affinity between the *i* and the *e*. We must therefore be contented to suppose that the first part of *i-n* is the ultimate weakened form of the second personal pronoun, the stronger form of which appears in the Greek locative ἴ-να, "where", and both stronger and weaker in the forms analyzed in the last chapter but one. There are traces of this locative of the second pronoun in the prepositions εἰν, εἰνί. The common preposition ἐν, however, was simply the locative of the pronominal stem ἐ=ᾱ, denoting sepa-

ration or distinct and definite locality, and in this pronominal sense it is often used in the best writers. Thus, Sophocl. *Æd. Tyr.* 27. ἐν δ' ὁ πυρφόρος θεὸς σκήψας ἐλαύνει. And thus we see why the first and second personal pronouns, when it was necessary to give to them that more marked and definite expression of locality which is conducive to their distinctness as numerals, were occasionally combined with this locative of the third personal pronoun.

That εἰς and ἐν are essentially the same word has not escaped the notice of Greek scholars. In Pindar we have ἐν with an accusative case expressing motion to a place, where we should certainly find εἰς in Attic (*Pyth.* II. 11, and 86. V. 38. *Nem.* VII. 31), and there are passages in which εἰς with an accusative is found instead of ἐν with a dative (Porson *ad Eurip. Phœniss.* 1381). It might be suggested that εἰς=ἐνς was the basis both of ἐς, and ἐν, the former omitting the ν, the latter the σ. But it is not necessary to regard them in this light. We consider them to be related simply as μείς, μέν, δείς and δέν; namely, μέν, δέν and ἐν are three locatives, and μείς, δείς and εἰς are three transitive forms incorporating the idea of locality. That εἰς expresses motion to a place (not unlike -δε) while ἐν expresses nothing but locality, or the abiding in a place, is to be explained from the addition of the element σ, which is also a mark of the nominative or relation of subjectivity. The termination *n(ă)s* appears also in the Latin preposition *tra-ns*.

There is only one passage so far as we know, in which the preposition εἰς has occasioned any difficulty. It is in Euripides *Bacchæ* 742.

ταῦροι δ' ὑβρισταί, κείς κέρας θυμούμενοι
τὸ πρόσθεν.

from which Virgil has taken his *irasci in cornua* (*Georg.* III. 232. *Æneid*, XII. 104), and which is also imitated by Ælian (*Hist. Anim.* II. 20, and IV. 28, where we have ὑβρίζειν εἰς κέρας). We think the line in Euripides explicable from the idea of "looking towards", implied in the classical use of εἰς, and from the passage in his *Helena* (1558), where a bull is described as κυρτῶν τε νῶτα κείς κέρας παρεμβλέπων.

With regard to the usage of ὥς as a synonym for εἰς, it need only be observed that this adverb is constantly employed by the best writers with prepositions of motion like εἰς, ἐπί, πρὸς,

followed by an accusative, so that the three words are equivalent to $\acute{\omega}\varsigma$ with a participle, and the construction is explained in the common grammars by a supposed ellipse of the participle. This explanation is equally applicable to the case of $\acute{\omega}\varsigma$ with an accusative. The fact is, that $\acute{\omega}\varsigma$ is the oldest form of the proper ablative of the relative $\acute{\omicron}\varsigma$: for the oldest Latin ablative ends in *-d*; thus we have such forms as *in altod marid, senatud, prædad*, &c. in ancient Roman inscriptions. The Sanscrit ablative ends in *-ât*, which bears the same relation to the Greek in *-ws*, that *dadâti* does to *δίδωσι*, or *samât* to *ὁμῶς* (Bopp *Vergl. Gramm.* p. 215). Now the proper meaning of the ablative is motion from a place, which of course implies motion to a place. Hence the Latin ablative forms *eo, quo*, &c. always express the *terminus in quem*. And thus we may readily conceive how the same meaning might be conveyed by $\acute{\omega}\varsigma$, which certainly bears this sense whenever it is coupled with participles.

The most elementary notion of situation next to that of mere locality is the notion of that which is *before* us, in which the notion of forwardness, or motion forwards is included. The simplest word for expressing this in Greek is $\pi\rho\acute{o}$, which is a compound of the first pronominal stem under the form *pă* with the termination *ra*, signifying, as we have seen, motion, and conveying the idea of beyond. This word, like $\epsilon\acute{\iota}\varsigma$ and $\acute{\epsilon}\nu$, appears among the numerals, for a superlative form of it ($\pi\rho\acute{\omega}\tau\omicron\varsigma$) is used as the ordinal of the first number. Another form of $\pi\rho\acute{o}$ is $\pi\rho\omicron\tau\acute{\iota}$ (Sanskrit *prati*) or $\pi\omicron-\tau\acute{\iota}$, which bears the same relation to $\pi\rho\acute{o}$ that $\acute{\alpha}\nu\tau\acute{\iota}$ does to $\acute{\alpha}\nu\acute{\alpha}$: the second part in both words is the shortened form of the demonstrative $\tau(\acute{\epsilon})$. That $\pi-\rho\omicron-s$ is only the fuller and more genuine form of $\pi-\rho\acute{o}$ appears as well from the comparison of $\acute{\alpha}-\pi\acute{o}$, $\acute{\alpha}\psi$, suggested above, as from the fact that $\pi-\rho\omicron\varsigma$ under the still more complete form $\pi\acute{\alpha}\rho\omicron\varsigma$ is used as a synonym for $\pi\rho\acute{o}$. The idea of motion, conveyed by $\pi-\rho\acute{o}\varsigma$ or $\pi-\rho\omicron-\tau\acute{\iota}$, has been before explained; the form $\pi\rho\acute{o}\varsigma$ combines with a word expressing *here*, the syllable *ra* indicating motion, and the termination *s*, which has much the same force: compare $\epsilon\acute{\iota}\varsigma$: $\pi\rho\omicron-\tau\acute{\iota}$ subjoins a stem conveying the idea of locality.

The preposition $\acute{\epsilon}\pi\acute{\iota}$ in its primary meaning expresses only a situation immediately over and upon some place. When we compare it with the Sanscrit preposition *abhi*, formed from the pronominal stem *a*, and the termination *bhi* which finds a repre-

sentative in the Greek $\epsilon\pi\iota$ and the Latin *bi* (as in *i-bi* from *is*), we cannot refrain from believing that $\epsilon\pi\iota$ is only a softened form of *abhi*. Wilson's account of *abhi* is as follows. "*Abhi* is a preposition and particle implying (1) superiority in place, rank, or power (over, upon, against, above), (2) proximity (near), (3) separation (severally), (4) wish, desire, (5) conjunction, particularizing (to, with respect to). Thus, *abhi-kramitun*, to overpower; *abhi-gantun*, to approach; *abhi-khyâtun*, to speak to; *abhi-bhava*, disgrace; *abhi-lâsha*, desire; *abhyagnin*, on the fire." From this *abhi* we have the adverb *abhitas*, "near". The conjunction and inseparable preposition *api*, which is a still nearer approach to the Greek $\epsilon\pi\iota$, occurs as a preposition before a few roots, and seems to signify 'over'; the roots *dhâ*, "to place", *nah*, "to fasten", receive the meaning 'to cover' when this particle is prefixed. The *a* of *api* is usually omitted; e. g. *pinaddha*, "covered", "clothed". As a conjunction, we very often find *api* by itself, without any rejection of the *a*, in which case it signifies "even", "though", "yet", "assuredly", "moreover", "therefore", "also"; it is likewise an interrogative particle, and when added to the interrogative *kim* is equivalent to *quispiam* (Wilson *sub v.*; Bopp, *Kritische Grammatik der Sanskrita-Sprache*, p. 55; and *Glossar. Sanscr.* p. 11). So that *api* and *abhi* seem to be modifications of the same word. This view of the connexion of $\epsilon\pi\iota$, *abhi*, and *api*, is supported by the common usage of $\epsilon\pi\iota$, which always conveys the idea of nearness or approximation, even when it is followed by an accusative, and therefore signifies motion. It coincides so remarkably in some of its applications with the Latin *ob*, that it is difficult to suppose the Greek and Latin prepositions can have had different origins. In Ennius *ob* is a preposition signifying merely motion to a place, e. g. in Festus, *ob Romam noctu legiones ducere cæpit*, and in the fragment of his *Telamon* quoted by Cicero (*Tusc. Disp.* III. 18), *Hicine est ille Telamo, modo quem gloria ad cælum extulit, quem adspectabant, cujus ob os Graii ora obvertebant sua*. The same may be said of the use of *obeo*, "to go to", "to visit". The English preposition "upon" conveys much the same idea as $\epsilon\pi\iota$ in such passages as Hom. *Od.* v. 17, $\omicron\iota\ \kappa\acute{\epsilon}\nu\ \mu\iota\nu\ \pi\acute{\epsilon}\mu\pi\omicron\iota\epsilon\nu\ \epsilon\pi'\ \epsilon\upsilon\rho\acute{\epsilon}\alpha\ \nu\acute{\omega}\tau\alpha\ \theta\alpha\lambda\acute{\alpha}\sigma\sigma\eta\varsigma$.

It is this meaning of nearness which has given rise to the use of $\epsilon\pi\iota$ in composition to signify mutuality, an interchange, a running

of one thing into another. As this meaning of ἐπὶ has not been sufficiently noticed by Greek scholars, we shall illustrate it by examples. In this sense it is frequently joined with ἄλλος, or some word like it, and the origin of the meaning seems to be the same as that of ἀλλήλων, with which indeed it is combined, if we may adopt Hermann's very probable emendation of Sophocles (*Antig.* 57):

τρίτον δ' ἀδελφῷ δύο μίαν καθ' ἡμέραν
αὐτοκτονοῦντε, τῷ ταλαιπώρῳ, μόρον
κοινὸν κατειργάσαντ' ἐπαλλήλοισιν χεροῖν.

The expression of mutuality or interchange by juxtaposition seems to have been the result of a natural love of brachylogy or the shortest mode of expressing our meaning. When we say "they hurt one another", we mean that *A* hurt *B*, and also that *B* hurt *A*: which would certainly not be expressed by saying "the one hurt the other". Similarly in Greek, if we wrote ἄλλοι ἔκτειναν ἄλλους, we should merely express that the one party killed the other, but if we put the two pronouns together and write ἄλλοι ἄλλους (ἀλλήλους) ἔκτειναν, we express that the slaughter was mutual, that there were killers on both sides. It is therefore by an obvious contrivance for the purpose of saving a superabundance of words, that, whenever reciprocity is intended to be expressed, the subject and object are placed in immediate contact, in order that the hearer or reader may combine them both into one idea of agency. It is precisely the same case with phrases like πρὸ ὁ τοῦ ἐνόησεν and πρὸς ἀλλότ' ἄλλον. This expression of reciprocity, by creating an idea of contiguity or contact, is sometimes extended in Greek to an expression of identity. This appears from the use of ἐαυτοῦς, αὐτοῦς, for ἀλλήλους (see Hesychius and his commentators *sub v.* ἐαυτοῦς). In the passage of Sophocles quoted above, we have αὐτοκτονοῦντε for ἀλληλοκτονοῦντε, and farther on in the same play (145), we find καθ' αὐτοῖν δικρατεῖς λόγχοι στήσαντε for κατ' ἀλλήλων. In Plato (*Parmenides*, p. 133 E) we see the grounds of this usage more clearly: ἀλλ' οὐ τὰ ἐν ἡμῖν πρὸς ἐκεῖνα τὴν δύναμιν ἔχει οὐδὲ ἐκεῖνα πρὸς ἡμᾶς, ἀλλ', ὃ λέγω, αὐτὰ αὐτῶν καὶ πρὸς αὐτὰ ἐκεῖνά τέ ἐστι, καὶ τὰ παρ' ἡμῖν ὡσαύτως πρὸς ἐαυτά,—that is, ἀλλήλων καὶ πρὸς ἄλληλα. We do not very well understand what the author of the συναγωγὴ λέξεων χρησίμων (*Bekkeri Anecd.* p. 378) means by asserting that the converse is the

case: ἀλλήλων ἀντὶ τοῦ ἐαυτῶν. οὕτως Εὐριπίδης καὶ Θουκυδίδης· καὶ πού τινες ἀλλήλων ἐγεύσαντο, ἀντὶ τοῦ ἐαυτῶν. The passage of Thucydides here alluded to is as follows (II. 70): ὁ τε σῆτος ἐπελελοίπει, καὶ ἄλλα τε πολλὰ ἐπεγέγνητο αὐτόθι ἥδη βρώσεως πέρι ἀναγκαίας, καὶ τινες καὶ ἀλλήλων ἐγέγευντο. It is here simply stated that the Potidæans were reduced to the necessity of feeding on human flesh: of course ἀλλήλων is not here used in its ordinary signification, for there could certainly be no reciprocity in such an action as that here referred to; but still less can any reflexive meaning be intended. Thucydides perhaps considers the Potidæans as one body, and intends, by the use of ἀλλήλων, to indicate that they fed upon the corpses of their fellow citizens: this is the only way in which we can comprehend the interpretation given in the συναγωγή. There are other passages in which ἀλλήλων cannot be interpreted with any reference to reciprocity. In *Odyss.* xii. 102 ἀλλήλων must be equivalent to ἐτέρων if the present punctuation is retained:

τὸν δ' ἕτερον σκόπελον χθαμαλώτερον ὄψει, Ὀδυσσεῦ,
πλήσιον ἀλλήλων· καὶ κεν διοϊστεύσεις.

But it is better, perhaps, to understand it as if it were written οἱ σκόπελοι πλήσιόν εἰσιν ἀλλήλων, putting a full stop at the end of the first line. In such words as ἀλληλοῦχος, ἀλληλουχία, the idea of reciprocity is merged in that of contiguity or union.

Besides ἐπάλληλος we have ἐπαλλόκαρπος and ἐπαλλόκαυλος in Theophrastus (*Hist. Plant.* III. 18), with the same meaning of reciprocity. The use of ἐπαλλάσσειν and its derivatives, in the sense of alternation or interchange, is very common. Thus in Homer (*Iliad* xiii. 359) we have

τῷ δ' ἔριδος κρατερῆς καὶ ὁμοίου πολέμοιο
πεῖραρ ἐπαλλάξαντες, ἐπ' ἀμφοτέροισι τάνυσσαν,

i. e. “alternating the rope of war, pulling it now to one side, now to the other, fighting with various success”. The metaphor is taken from a game, in which two people tried their strength by pulling at a rope, which is also alluded to in *Iliad* xi. 336:

ἐνθα σφι κατὰ ἴσα μάχην ἐτάνυσσε Κρονίων.

The Homeric ἐποίχεσθαι also expresses reciprocity, especially when it means “to walk backwards and forwards in weaving”: comp. ἱστὸν ἐποιχομένην (*Iliad* i. 31) with Pindar's ἱστῶν παλιμβάμους ὁδούς (*Pyth.* IX. 18).

The word ἐπαλλαγή is used by Herodotus (I. 74) to express an interchange of matrimonial relations between two families; καὶ γάμων ἐπαλλαγὴν ἐποίησαν· Ἀλυάττεα γὰρ ἔγνωσαν δοῦναι τὴν θυγάτερα Ἀρυήνιν Ἀστυάγει τῷ Κυαζάρει παιδί. On the similar word ἐπάλλαξις, see Wyttenbach on Plutarch (*Moral* I. 2, p. 885). In this sense ἐπιγαμία is used (Herodot. II. 147); it also denotes a *jus mutui connubii* between two states or parties in a state (Wolf *ad Demosth. Leptin.* p. 282). The word ἐπαλλάπειν is used to express an interchange or interlacing in a material sense in the following passages: τὰ μὲν ἐστὶ καρχαρόδοντα αὐτῶν—τὰ δὲ ἀνεπάλλακτα—καρχαρόδοντα γὰρ ἐστὶν ὅσα ἐπαλλάττει τοὺς ὀδόντας τοὺς ὀξεῖς (Aristot. *Hist. Anim.* I. c. i. p. 501, Bekker). ἀρχεῶν τῶν νεύρων ἡ ἐπαλλαγή, “the interlacing of the ends of the muscles;” (Aretæus, p. 34 B, Boerhaave); and a line or two lower down in the same page, ἀλλήλοισι ἐπαλλαζάμενα εἰς χίασμον σχήματος, “interlacing with one another like the letter χ.” In a metaphorical sense ἐπαλλάττειν is applied to express verbal ambiguities, thus, Xenophon *Mem.* III. 8. § 1, μὴ πη ὁ λόγος ἐπαλλαχθῇ, “lest your words be perverted.” Aristot. *Polit.* I. 6, (p. 1255, l. 13, Bekker) αἴτιον δὲ ταύτης ἀμφισβητήσεως καὶ ὃ ποιεῖ τοὺς λόγους ἐπαλλάττειν, ὅτι.... ἐπεὶ διαστάντων γε χωρὶς τούτων τῶν λόγων, κ. τ. λ. “that which makes the arguments run into one another and interchange....for if they were kept distinct,...&c.” In this sense ἐπαμφοτερίζειν is very frequently found: ἐπαμφοτερίσαι. εἰς ἀμφιβολίας ἀγαγεῖν τὸν λόγον (Timæus *Lex. Platon.* S. v.): see also Suidas and Hesychius. Plato *Euthydemus*, p. 500, D, ὁ ἄδελφός σου ἐξημφοτέρικε τὸν λόγον.—*Resp.* V. p. 479 B, τοῖς ἐν ταῖς ἐστιάσεσιν ἐπαμφοτερίζουσιν ἔοικε—καὶ γὰρ ταῦτα ἐπαμφοτερίζειν.—*Schol. ad Aristoph. Pac.* 849, ἐπαμφοτερίζοντως λελέκται καὶ πρὸς τὸ πρᾶγμα καὶ πρὸς τὸ ἄσελγες. *Id. Plutum*, 635, παίζων γὰρ ἐπαμφοτερίζουσας λέξεις ἔθηκεν. The word also occurs in the sense of “to fluctuate,” “to waver between two parties or opinions:” ἐπαμφοτερίζειν, τὸ μὴ παγίως ἐν τι βουλευέσθαι καὶ πράττειν, ἀλλὰ καὶ τόδε καὶ τόδε διανοεῖσθαι. *Bekkeri Anecd.* p. 41, as we see in Thucyd. VIII. 85, φθείροντα τῶν Πελοποννησίων τὰ πράγματα μετὰ Ἀλκιβιάδου καὶ ἐπαμφοτερίζοντα. Plat. *Phædrus*, p. 257 B, ἵνα καὶ ὁ ἐραστής ὁδε αὐτοῦ μήκετι ἐπαμφοτερίζῃ.

The same idea of reciprocity is conveyed by ἐπαμείβειν and ἐπαμοιβαδῖς. It may also be inferred that ἐπίχειρα in the sense of a reward or punishment contains the same notion; ἐπίχειρον. ἀνταπόδοσις Hesychius; τὰ πῖχειρα. τὸν μισθόν, τὰς ἀμοιβάς. Suidas. Hence Æschyl. *Prometh.* 327, τοιαῦτα μέντοι τῆς ἄγαν ὑψηγόρου γλώσσης, Προμηθεῦ, τὰ πῖχειρα γίγνεται. The 28th line of the same play: τοιαῦτ' ἀπῆνύρω τοῦ φιλάνθρωπου τρόπου is explained by the Scholiast, τὰ τῆς φιλάνθρωπίας ἐπίχειρα τοιαῦτά σοι ἐγένετο, probably, as Hemsterhius suggests (*ad Lucian.* I. p. 106. p. 370 *Lehm.*), with reference to line 327. Plato *Resp.* X. p. 608 c, τὰ γε μέγιστα ἐπίχειρα τῆς ἀρετῆς καὶ....ἄθλα. In Sophocles *Antig.* 814, οὔτε ξιφέων ἐπίχειρα λαχούσα punishment is implied: but in the Greek idea of punishment, that of an equivalent or *quid pro quo* was always included. The word ἐπίχειρα is of course intimately connected in meaning and origin with ἐπιχρῆσθαι, "to have an habitual interchange of kindnesses with any one." Thus, Herod. III. 99, ἣν δὲ γυνὴ κάμη, ὡσαύτως αἱ ἐπιχρεώμεναι μάλιστα γυναῖκες ταῦτά τοῖσι ἀνδράσι ποιεῦσι. Thucyd. I. 41, ἀξίωσιν χάριτος τοίανδε ἣν οὐκ ἐχθροὶ ὄντες ὥστε βλάπτειν οὐδ' αὖ φίλοι ὥστ' ἐπιχρῆσθαι ἀντιδοθῆναι ἡμῖν ἐν τῷ παρόντι φάμεν χρῆναι. Plato *Legg.* XII. p. 953 A, ἀναγκαῖα μὲν ὡς ὀλίγιστα δὲ ἐπιχρωμένους. The same meaning of reciprocity is conveyed by ἐπιμαχία, "an alliance for mutual defence," as distinguished from συμμαχία. Thus, Thucyd. I. 44, συμμαχίαν μὲν μὴ ποιησάσθαι, ὥστε τοὺς αὐτοὺς ἐχθροὺς καὶ φίλους νομίζειν....ἐπιμαχίαν δὲ ἐποίησαντο, τῇ ἀλλήλων βοηθεῖν. V. 48, ἀρκεῖν τὴν ἐπιμαχίαν, ἀλλήλοις βοηθεῖν, ξυνεπιστρατεύειν δὲ μηδενί. Ammon. *περὶ διαφ. λεξ.* Συμμαχεῖν καὶ ἐπιμαχεῖν διαφέρει· συμμαχεῖν μὲν γὰρ λέγουσιν τὸ σὺν ἑαυτοῖς, φησὶ Δίδυμος, εἴτ' αὐτοὶ ἐπίοιεν πολεμίοις εἴθ' ἕτεροι ἐπιστρατεύοιεν· ἐπιμαχεῖν [δὲ] ὅτε τοὺς ἐπίοντας ἀμύνονται μόνον (according to Valckenaer's emendations). Words formed with the preposition ἐπὶ are also used of actions which take place on the borders of two countries, or on debatable land: for then a reciprocity, a motion in both directions, a *hin und her*, as the Germans say, is implied. Thus, ἐπεργασία is "a communion of husbandry between two neighbouring states," "a mutual right of ploughing in one another's lands:" and ἐπινομία is the same with regard to pasture.

Xenoph. *Cyrop.* III. 2. § 23, ἐπιγαμίας δὲ εἶναι καὶ ἐπεργασίας καὶ ἐπινομίας καὶ ἐπιμαχίαν δὲ κοινήν, εἴ τις ἀδικοίη ὁποτέρους. Plato, *Legg.* VIII. p. 843 c, τῶν τε ἄλλων πέρι καὶ δὴ καὶ ἐπεργασίας συμπάσης ὅς δ' ἂν ἐπεργάζεται τὰ τοῦ γείτονος ὑπερβαίνων τοὺς ὅρους. Aristot. *Polit.* V. 4, 5, τῶν εὐπόρων τὰ κτήνη ἀποσφάζας λαβὼν παρὰ τὸν πόταμον ἐπινέμεντας. The verb ἐπινέμειν is also used when a common trespass on the part of a neighbour is spoken of, as in Demosthen. in *Calliclem*, p. 1274: καὶ τῶν γειτόνων ἐπινεμόντων ἅμα καὶ βαδιζόντων διὰ τοῦ χωρίου, τὴν αἰμασίαν περιωκοδόμησε ταύτην. From the fact that the debatable land between two countries was generally left untilled, ἐπεργασία is also applied to the cultivation of such land, or generally to the appropriation of sacred or public property. Aristot. *Rhet.* I. 13, (p. 1374 A. Bekk.) ἐπεργάσασθαι μὲν ἄλλ' οὐ δημόσια. Diodor. Sicul. XVI. 23: οἱ δὲ Φωκεῖς ἐπεργασάμενοι πολλὴν τῆς ἱερᾶς χωρᾶς. From not observing this use of ἐπὶ in composition, every one, so far as we know, has misinterpreted an interesting passage in Æschylus (*Agamemnon* 444).

γυναικὸς αἰχμᾶ πρέπει
 πρὸ τοῦ φανέντος χάριν ζυναιέσαι.
 πιθανὸς ἄγαν ὁ θῆλυς ὅρος ἐπινέμεται
 ταχύπορος. ἀλλὰ ταχύμορον
 γυναικογήρυτον ὀλλυται κλεός.

Without dwelling on the absurdities of the commentators, it will be sufficient, after what we have already said on the meaning of ἐπινέμειν, to translate the passage. The chorus says "It is in accordance with the disposition of a woman" (so *Choeph.* 630, γυναικεῖαν ἄτολμον αἰχμάν: αἰχμῇ is connected with αἶσσω root αἶκ- as δραχμῇ is with δράσσω root δρακ-) "to express her gratitude before the good luck really appears. Too credulous, the boundaries of a woman's mind are easily encroached upon. But a good report set on foot by a woman perishes by a speedy fate." Here, ὅρος is used by a strong, but very intelligible metaphor, just as in v. 1077 of the same play (πόθεν ὅρους ἔχεις θεσπεσίας ὁδοῦ κακορρήμονας). Another word of some difficulty, in which we believe ἐπὶ is found with this sense, is ἐπιραβδοφορεῖν, which signifies to gallop as applied to a horse. This meaning is generally supposed to

be derived from the ῥάβδος, or riding-whip, with which the rider struck his steed in order to quicken its motion. Passow compares it with ἐπισείειν, which is used in much the same sense: but we are convinced that this last word is derived from the act of shaking the rein in order to urge on the horse, a practice to which allusion is frequently made in the Greek writers. Thus, Soph. *Antig.* 109,

φυγάδα πρόδρομον ὀξυτέρῳ
κινήσασα χαλινῶ,

which the editors have generally misunderstood. Euripides *Iphig. Taur.* 909, ὥσθ' αἵματηρὰ στόμι' ἐπεμβαλεῖν ἐμοί. The Furies put their bits into the mouth of Orestes, and, by shaking the rein till the snaffle was covered with blood, urged him to furious flight: see *Alcest.* 495, χαλινὸν ἐμβαλεῖν γνάθοις. The passage in Xenophon in which the word ἐπι-ραβδοφορεῖν occurs, is as follows (*de Re Equestri* VII. 11): μετὰ δὲ ταῦτα τὸν αὐτοφυῇ διατροχάζων διαχαλῶν τ' ἂν ἀλυπότατα τὸ σῶμα καὶ εἰς τὸ ἐπιραβδοφορεῖν ἥδιστ' ἂν ἀφικνοῖτο, ἐπειδήπερ καὶ ἀπὸ τῶν ἀριστερῶν ἄρχεσθαι εὐδοκιμώτερον, ὧδ' ἂν μάλιστα ἀπὸ τούτων ἄρχοιτο εἰ διατροχάζοντος μὲν, ὅποτε ἀναβαίνοι τῷ δεξιῷ, τότε σημαῖνοι τῷ ἵππῳ τὸ ἐπιραβδοφορεῖν. τὸ γὰρ ἀριστερὸν μέλλων αἶρειν ἐκ τούτου ἂν ἄρχοιτο. Now it is quite clear from this passage that ἐπιραβδοφορεῖν applies to an action, not of the rider but of the horse, and this action is the gallop, for the whole passage is about the change from the trot to the gallop. The Greek word for "to trot" is, as we see here, διατροχάζειν, "to make two wheels," for, as every one knows, when a horse trots, he makes semi-circles with his legs first on one side of the body and then on the other: so that the hind and fore feet on the same side occasionally touch. To this Virgil alludes in the *Georgica* III. 192, when talking of breaking the horse:

At, tribus exactis, ubi quarta accesserit æstas,
Carpere mox gyrum incipiat, gradibusque sonare
Compositis, sinuetque alterna volumina crurum.

Which Voss, with his usual accuracy, translates "*und erhebe die wechselnde Krümme der Schenkel.*" That Virgil is here

talking of the trot is farther obvious from his allusion to the gallop, which immediately follows:

tum cursibus auras

Tum vocet, ac per aperta volans, ceu liber habenis,
Æquora, vix summa vestigia ponat arena.

It appears then that the word to express the action of trotting was derived from the appearance of the horse's legs in trotting: accordingly, we should expect that the same would be the case with the word expressing the gallop. Now the primary idea in ῥάβδος is "beating," "striking," "an instrument to strike with"—ῥάσσειν, ῥαπίζειν; and it appears to have been one of the chief functions of the ῥαβδούχος or ῥαβδοφόρος, to inflict the punishment of stripes; see Thucyd. V. 50. ὑπὸ τῶν ῥαβδούχων πληγὰς ἔλαβεν, and Æsch. *Suppl.* 846, where a ῥαβδούχος says γομφοδέτῳ δὲ δόρει δι' ὅλου αἵμον' ἴσω σ' ἐπ' ἀμίδα (a passage which we shall explain more fully in a subsequent chapter), and when a horse gallops or canters he strikes the ground *alternately* with his fore and hind feet. This, therefore, is expressed by ἐπιραβδοφορεῖν.

The use of ἐπὶ to signify combination or coexistence may also be immediately explained from the preposition's original sense of nearness or contiguity. Thucyd. II. 101. ὑποσχόμενος ἀδελφὴν δώσειν καὶ χρήματα ἐπ' αὐτῇ. Soph. *Antig.* 555. οὐκ ἐπ' ἀρρήτοις γε τοῖς ἐμοῖς λόγοις. *Ibid.* 759. ἐπὶ ψόγοισι δεινάζειν. Eurip. *Ion.* 235. ἐπ' ἀσφάκτοις μήλοισι. In this way ἐπὶ is especially used when dishes are spoken of as eaten together: thus Aristoph. *Equit.* 707. ἐπὶ τῷ φάγοις ἡδιστ' ἄν; ἐπὶ βαλαντίῳ; *Pax.* 123. ἔξετ' ἐν ὥρᾳ κολλύραν μεγάλην καὶ κόνδυλον ὄψον ἐπ' αὐτῷ. *Acharn.* 835. παίειν ἐφ' ἀλὶ τὰν μάδδαν. Xen. *Mem.* III. 14. § 2. ἐσθίειν ἐπὶ τῷ σίτῳ ὄψον. *Cyrop.* VI. 2 § 27. ἐπὶ τῷ σίτῳ πίνειν, and even in metaphorical expressions, as when Pindar says (*Pyth.* IV. 187. Böckh.),

ἡμιθέοισιν πόθον πρόσδαιεν Ἥρα
ναὸς Ἀργοῦς, μή τινα λειπόμενον
τὰν ἀκίνδυνον παρὰ ματρὶ μένειν αἰῶνα πέσσοντ', ἀλλ' ἐπὶ καὶ
θανάτῳ

φάρμακον κάλλιστον ἐὰς ἀρετᾶς ἀλίζιν εὐρέσθαι σὺν ἄλλοις.

i. e. "Juno kindled in the minds of the heroes a longing for the ship Argo, so that no one should be left behind and re-

main by his mother's side, leading a sodden, insipid life free from danger, but that each should obtain in company with his mates a seasoning or relish even for death itself, in his own glory and renown" (On this sense of ἀρετή, see Pindar *Olymp.* VII. 163. Thucyd. I. 33. Sophocl. *Philoct.* 1406. Bekker. *Anecd.* p. 443, 33, &c.). It is quite a mistake of Matthiæ (*Gr. Gr.* § 586) to suppose that ἐπὶ has this force in sentences like ὃς ἐπὶ θυγατρὶ ἀμήτορι — ἐπὶ ταύτῃ ἔγημε ἄλλην γυναῖκα. ἡ δὲ ἐπεσελθοῦσα ἐδικαίειν εἶναι καὶ τῷ ἔργῳ μητρυνὴ τῇ Φρονίμῃ (Herod. IV. 154). Here ἐπὶ has the sense of coming into a family as a stranger, in which sense Schiller, in the song of the Bell, most naturally calls a step-mother "the stranger":

An verwaister Stätte schalten
Wird *die Fremde*, liebeleer.

That such is the meaning of ἐπὶ when applied to a step-mother is proved by the ἡ ἐπεσελθοῦσα in Herodotus, and by the following passage of Euripides (*Alcestis* 305):

καὶ μὴ 'πιγήμες τοῖσδε μητρυνὰ τέκνοις—
ἐχθρὰ γὰρ ἡ 'πίουσα μητρυνὰ τέκνοις
τοῖς πρόσθ'.

We now proceed to the consideration of those prepositions of which the leading idea is motion *from* or *out of* some given place. The shortest and simplest of these is ἐκ, or ἐξ, which is written *e* or *ex* in Latin. Various conjectures have been made with regard to the origin of this little word. Pott supposes (*Etym. Forsch.* II. p. 183) that it is connected with the Sanscrit *vahis* (*extra*); that the *-his* is represented by the Greek -ξ, and that a digamma has fallen out in the Greek word: he recognizes the same root in the Sanscrit *ava* (off, from), and considers οὐκ to be the same word with *avak* (*deorsum*). Hartung (*Partikeln* II. 81) looks upon ἐκ as a subsidiary form of οὐκ. It is true that οὐκ and ἐκ are the only words in the Greek language which ever end in κ, but it must be recollected that one of the words is written with a κ just where the other throws off the κ, and as this κ is the only letter they have in common it would be rather rash to assume their identity on such a ground as that. We reserve the consideration of οὐ, οὐκ for another chapter. It is clear to us that the ἐκ, ἐξ (ἐκς) bear

the same relation to one another that subsists between ἐν, εἰς (ἐνς), and that ἐξ is the original and proper form of the word. It is perfectly analagous to ἄψ the old Homeric form of ἀπό, and there are words of great antiquity into which ἐξ enters. It has been the lot of this preposition more than any other to suffer mutilation when used in composition. Thus we have κ-ροῦνος and κ-ρήνη from ἐκ-ρέειν, and, what is more to our purpose, ξένος from ἐξ, and the locative εἰς = ἐνς = ἐν(ο)s. Comp. *étranger*, *extraneus*, *straniero*. We have no doubt that ἐξ is, as we have mentioned before, a compound of the demonstrative stem *e*, whether or not a mutilation of *ea*, with the second pronominal element under the form -κis, so that, according to the principle of composition before explained, it expresses a removal from the *there* to that which is near to the *here*, and therefore naturally expresses "out of". We have still more mutilated forms of it in the Gothic *us*, Slavonic *iz*, Lithuanian *isz*, old Prussian and Lettish *is* (Grimm. III. p. 253), for we have already seen that the Lithuanian *sz* at any rate is a representative of the Greek guttural (above, p. 128). If ἐ-κ-s be immediately connected with *vahis*, as Pott supposes, we may compare ἐξ, *vah(i)s* with εἴκω, *weichen*.

For our purpose this preposition presents little that is deserving of notice. Its meaning is generally fixed with great accuracy, and it seldom occasions any difficulty. The only word in which its usage appears anomalous is ἐκθνήσκειν, which, though at first sight it might be thought a synonym of *emori*, "to die the death," is always used to signify "fainting", "seeming dead". Thus Homer *Odyss.* xviii. 100. ἀτὰρ μνηστῆρες ἀγανοὶ χεῖρας ἀνασχόμενοι γέλω ἐκθανον—which is precisely our idiom "died with laughter". Soph. *Trachin.* 568. ἐκθνήσκων δ' ὁ θῆρ τοσοῦτον εἶπε. "the monster, as he was fainting away, said just so much". Plato *Legg.* XII. p. 959 A. τὰς δὲ προθέσεις πρῶτον μὲν μὴ μακρότερον χρόνον ἔνδον γίγνεσθαι τοῦ δηλοῦντος τὸν τε ἐκτεθνεῶτα καὶ τὸν ὄντως τεθνηκότα, "the apparently dead", as opposed to "the really dead." Hippocr. *Morb. Vulg.* V. 7. καὶ ἐξέθανε πεντάκις, ὥστε τεθνάναι δοκέειν. (Comp. *Abresch. ad Æschyl. Agam.* 569), Plutarch *de serâ Num. Vind.* p. 563 D. κατενεχθεὶς ἐξ ὕψους τινός, οὐ γενομένου τραύματος ἀλλὰ πληγῆς μόνον, ἐξέθανε καὶ τριταῖος ἤδη περὶ τὰς ταφὰς αὐτὰς ἀπῆνεγκε. *Ælian. Hist. An.* VIII. 7. τὸν ἀψάμε-

νον λειποθυμῆν καὶ ἐκθνήσκειν τὰ πρῶτα, εἶτα μέντοι καὶ ἀποθνήσκειν, *Hesych.* ἐξέθανεν· ἐλειποθύμησεν. The origin of this meaning is the opposition of the *outward* and *seeming* to the *intrinsic* and *real*. It is very well explained by Eustathius in his note on the passage of Homer just quoted: δηλὸν δὲ ὡς ἀφέλως καὶ γλυκέως τὸ ἄγαν γελάσαι γέλωτι ἐκθανεῖν λέγεται, ἥγουν ἔξω, καὶ, ὡς εἶπεν, ἐπιπολαίως θανεῖν, καὶ οὐ κατὰ τὸ κυρίως θανεῖν.

The prepositions ἀπό and παρά also express motion from a place. The former corresponds to the Sanscrit *apa*; its original form was ἀ-πό-ς, and as such it denotes motion from a distant object to the subject. The latter is related to the Sanscrit *para*, and as a compound of the first pronoun *pā = mā* (compare πε-δά, με-τά) with -*rā* denotes primarily motion from the subject, and, by a secondary sense, conveys generally the idea of motion connected with that of closeness, and may even signify motion to the subject. For *para* we also find *apara*, which is only the comparative of *apa*, that is, *apa* with the suffix -*ra*, which we have before explained; it has also a superlative *parama* (see Schlegel's *Indische Bibliothek*. I. p. 362): *para* is an indefinite pronoun in its ordinary use, and is equivalent to ἄλλος, *alius*, the relative meaning of which we have before discussed. When we compare *para*, παρά, πέραν (Sanskrit *param*), πείρειν, *per*, *peren-die*, with π-ρό-ς, παρος (Sanskrit *puras*), *præ*, *pro* (Sanskrit *pra*), πρω-ί, *pru-ina*, on the one hand, and περί (Sanskrit *pari*), *pari-es*, *pari-et-is* ("a wall", "that which goes round a house"), on the other hand, we shall find it impossible to believe that the Greek prepositions προ, παρά, and περί, and the Latin *pro*, *præ*, *per* are not etymologically connected. Nor is there much difficulty in reconciling their various meanings. The essential part, the expression of the *here*, is the same in all the words which we have compared above; the only variation is in the affix, which is written *ro-s*, *ra*, *ri*. Let us examine the force of these terminations in the Greek: (1) π-ρό, π-ά-ρο-ς, signifying "that which is before the subject"; π-ρό-ς, π-ρο-τί, "motion towards that which is before the subject", when joined with the accusative, "mere direction" when joined with the genitive, and "closeness" when joined to the dative; in this last collocation it also signifies, by a very natural transition, "adding", or "superimposing": (2) πα-ρά is found with the same three cases, and in its general use corresponds pretty nearly with π-ρό-ς,

except in its use with the genitive, when it invariably means that something is taken away from some other thing; it is true there is an appearance of the same force in such phrases as πρὸς πατρός, μητρός, "on the father's, mother's side", οἱ πρὸς αἵματος, "blood-relations", αἶτε θέμιστας πρὸς Διὸς εἰρύεται, "by commission *from* Jupiter" (*Iliad* i. 239), οὐδ' ἀκλεής νιν δόξα πρὸς ἀνθρώπων ὑποδέξεται, "proceeding *from* men" (Eurip. *Heracl.* 625), and in the other examples cited by Matthiæ; but the more general use of π-ρὸ-s is unquestionably to denote motion, not *from*, but *to*, a place before us: (3) πε-ρί generally signifies, when joined to the genitive, "relation"; when joined to the dative, "closeness", "on", "about"; when joined to the accusative, it answers to the question "whither?" "where?" We see, then, that the general difference in meaning between π-ρό, πα-ρά, πε-ρί, is very slight; indeed in some cases their meaning is so nearly the same, that one of the three might be substituted for either of the others without materially affecting the sense. Thus, with the dative, "at", πρὸς μέσῃ Τρ. ἀγορᾷ (Sophocl. *Trach.* 371, comp. ἐν μέσῃ Τρ. ἀγορᾷ, *ibid.* 423), παρὰ τυραννίδι (Pind. *Pyth.* II. 159), περὶ Σκαιῇσι πύλῃσι (*Iliad* xviii. 453); with the accusative, "with respect to", τέλεος πρὸς ἀρετὴν (Plat. *Alcib.* I. p. 120 E), πονηρὸς περὶ τι (Plat. *Resp.* V. *ad init.*); "on account of", πρὸς ὧν τὴν ὄψιν ταύτην τὸν γάμον τοι τοῦτον ἔσπενσα (Herod. I. 158), ἕκαστος οὐ παρὰ τὴν ἑαυτοῦ ἀμελείαν οἶεται βλάψειν (Thucyd. I. 141). We have another proof of their identity in the way in which the Latin prepositions are used to express the meaning of these three. Thus *præ*, which bears more outward resemblance to πά-ραι, is used as a synonym for περὶ in *præ metu*, περὶ τάρβει: *per*, which externally resembles περὶ, is used as a synonym for παρὰ in such phrases as παρὰ τοῦτο, *per hoc*: also *præ-ter*, the comparative of *præ*, in πα-ρὰ δόξαν, *præter opinionem*; *præ* is also used for περὶ in such sentences as περὶ πάντων, *præ omnibus*; also *præ* and *per* are sometimes synonyms; *non possum præ fletu* (Cic. *Att.* XI. 7) *neque per ætatem potis erat* (Ter. *Eun.* I. 2, 32): *per* is used in Latin, where πρὸς is in Greek, to express the person called upon to witness an oath: and πρὸς and *per* are used in the same way with a neuter adjective in an adverbial sense: compare πρὸς τάχος for ταχέως (Plato, *Legg.* VII. p. 810 B) with *per tacitum* for *tacite* (Virgil, *Æneid* IX. 30): περὶ and

per agree in the intensive sense: compare *περικαλλής* with *perpulcer*.

There is one use of the preposition *περὶ* which is not found in any of the cognate prepositions, except in the Sanscrit *pari*. These words frequently mean “round about”, like the German *um* and the Latin *circum*, and *περὶ* designates, by an association which we have already explained, not only that which surrounds, but also that which is surrounded. The former meaning is due to a connexion of the ideas of *closeness* and *removal* in this word: the last vowel seems to point to the fragment of a case denoting rest, and the termination *ra* indicates motion. It may, therefore, be surmised that the whole word denotes motion confined to a sphere of action not far removed from the subject. The other meaning has, perhaps, arisen from the wider signification of *πα-ρά*, which seems to denote simply motion from the subject; and has generated the ideas of “going through”, “piercing”, “boring a hole”, conveyed by *περί* and its derivatives *πείρω*, *περονή*, *πορπή*. That *περί* does bear this meaning appears from a well-known line in Sophocles (*Ajax*, 890),

ἐν γάρ οἱ χθονὶ
πηκτὸν τόδ' ἔγχος περιπετὲς κατηγορεῖ.

Lobeck approves of the interpretation of Eustathius (p. 644, 7), Σοφοκλῆς ἔγχος περιπετὲς εἰπεῖν ἐτόλμησεν, ᾧ περιπέπτωκεν Αἴας. This interpretation has obviously been suggested by two other lines in the same play—πεπτῶτα τῷδε περὶ νεορῥάντῳ ξίφει (815), and κεῖται κρυφαίῳ φασγάνῳ περιπτυχῆς (883). But these passages have nothing to do with the proper interpretation of *περιπετὲς* in the former one: the construction of that line is obvious, and though it is true that *περὶ* generally denotes that which is round any spot, and not a round hole, it does not follow that it may not have borne the other signification also. Lobeck quotes the following passages in illustration of the line in Sophocles; Ælian, *Hist. An.* XV. c. 10, ἀγκιστρα περιπαγέντα τοῖς ἰχθύσι; Liban. *Decl.* Tom. iv. p. 1081, ὀδόντες τῇ δείρῃ περιπέιρονται; Chrysostom. *Opp.* Tom. iii. 85 A, ἐαυτῷ τὸ ξίφος περιέπειρε. But the age of the authors quoted renders their authority of little value: indeed the passages prove no more than that these writers understood the line in Sophocles as we do, and had probably met with other passages like it. The fol-

lowing analogies are more to the purpose. It will not be denied that the ideas of "boring", "piercing", "roundness", &c. are mixed up in the family of words which includes *τόρ-ος*, *τόρ-νος*, *τορ-εύω*, *τόρ-μος*, *τι-τρά-ω*, *τε-τραίνω*, *τρώω*, *τι-τρώσκω*, *τραῦμα*, *τρύω*, *τρύπη*, *τρυπάω*, &c. Now these words are unquestionably connected with one of the simplest words expressing *beyond* or *motion*: we mean the ending *-tara*, *-τερος*, discussed in the last chapter. The analogies between this set of words and those we are discussing extends in many directions, both in Greek and Latin. In the first place, we have *τέρμα*, *τόρμος*, *terminus*, *trans*, by the side of *πέρας*, *πέραν* (*περάω*), "the object of a journey", "the place gone to". The words *τέρμα*, *πέλας*, also signify "an end", "a termination" in general, and verbs signifying "to end" or "finish" are frequently used in Greek to express a journey: thus *ἀνύσειν τὸν Ἄδαν* (Soph. *Aj.* 606), where Lobeck quotes *κατανύσας ἐξ Ἑ. ἐς Λ.* (Herod. VI. 140); *τελεῖν ἐπὶ τὸ τέρμα* (Lucian, *Trin.* § 20); *Ἀθήνας ἐκπεράν* (Athen. II. p. 47 c); *τέρμα βίοιο καὶ ἐς βαλβίδα περήσας* (Oppian. *Cyn.* I. 512); *ὁστοῦν εἰς τὴν ὑπερώαν περαιῖνον* (Galen, *de Usu Partium*, IX. 3, 508). By the side of *πέρας*, *τέρμα*, we have the by-forms *πέλας*, *τέλος*. In Latin the adjective *teres* is applied to signify roundness in general; *in se ipso totus, teres, atque rotundus* is said of a sphere in Horace (*Sat.* II. 7, 86). Compare Ausonius, *Id.* 16, *mundi instar habens, teres, atque rotundus*. It is also applied to a net, either because the ropes which composed it were cylindrical, and drawn through holes, or because it was full of holes, namely, the meshes. If the former is the true explanation, which is more probable, we may compare *teres* with *πεῖραρ*, the Homeric word for a rope (*Iliad* XIII. 359).

If we place this meaning by the side of the other significations of *π-ρο*, *πα-ρά*, *πε-ρί*, we see that the meaning of the Sanscrit pronoun *pa-ra=alius* is at the bottom of them all, and they are all merely modifications of the expression of *diversity* or *beyond* considered in immediate connexion with the subject; from this ground-meaning all their uses may be explained, the separate words being only different cases of the Sanscrit pronoun. This pronoun occurs directly in the Latin *peren-die* ("on another day"), *per-(^a)grinus* "(of another country)", and, we believe, in the Greek *περ-φερέες*. Herodotus says (IV. 33): *τοὺς Ὑπερβο-*

ρέους πέμψαι φερούσας τὰ ἱρὰ δύο κόρας—ἀμα δὲ αὐτῇσι ἀσφαλῆς εἵνεκεν πέμψαι τοὺς Ὑπερβορέους τῶν ἀστῶν ἄνδρας πέντε πόμπους τούτους οἱ νῦν Περφερέες καλέονται. Some suppose this word to be another form of περιφερέες: Guyet (on Hesychius *sub v.*) suggests that it is a synonym of *proceres*: and Niebuhr (*Hist. of Rome* I. p. 85) connects it with *perferre*. "If," he says, "it be but allowed that the people called Hyperboreans may have been a Pelasgian tribe in Italy, the possibility will perhaps be nearly turned into certainty when it appears that the title of the carriers was almost a Latin word." We think that the word merely signifies "the strange" or "foreign carriers." That περ-φερ-έες is connected with φέρω appears from the word φερούσας in the passage of Herodotus, and by the names *Amalophori* (Porphyr. *de Abstin.* II. 19), οὐλοφόροι (Servius *ad Virg. Æn.* XI. 858), also given to these personages. There is yet another Greek word in which we recognize this root, namely πέρ-περ-ος (περπερεύομαι, περπερεία). This word, which is evidently a reduplication, means a strange, out of the way, absurd person: compare the Latin *perperam*, *perperitudo*.

The intensive meaning which we find in περί and πέρ may be thought due to the idea of perfection and completeness suggested by the circle or sphere: thus Plato *Timæus* p. 33 B, καὶ σχῆμα δὲ, ἔδωκεν (ὁ θεός) αὐτῷ (τῷ κόσμῳ) τὸ πρέπον καὶ ξυγγενές· τῷ γὰρ τὰ πάντ' ἐν αὐτῷ ζῶα περιέχειν μέλλοντι ζῳῷ πρέπον ἂν εἴη σχῆμα τὸ περιειληφὸς ἐν αὐτῷ πάντα ὅποσα σχήματα· διὸ καὶ σφαιροειδὲς ἐκ μέσου πάντη πρὸς τὰς τελευτὰς ἴσον ἄπεχον καὶ κυκλοτερές αὐτὸ ἐτορνεύσατο πάντων τελεώτατον ὁμοιότατόν τε αὐτὸ ἐαυτῷ σχημάτων. But the same idea of completeness is found in πέρας, which derives it from the other and perhaps earlier sense of περί, namely, that of "going through", "piercing", "faring to the end"; and we believe that this is also the origin of the intensive meaning of περί. Compare the case of διά (mentioned below) and the English use of "thoroughly", "thorough-going", "through and through", &c.

It is easy to see that ὑ-πό, ὑ-πέ-ρ, and their Sanscrit and Latin equivalents *u-pa*, *u-pari*, *su-b*, *su-per*, are related to one another precisely in the same manner as the Sanscrit *a-pa*, *a-pa-ra*; that is to say, the latter preposition in each case denotes a continuation of the direction indicated by the former. We

have already endeavoured to show that ὑ-πὸ, (*su-b, u-pa*) is a compound of the second pronominal stem with the first, implying a motion or continuation from that which is immediately near in the direction of the subject. From this analysis it appears that ὑ-πὸ differs from ἀ-πὸ only in supposing the point from which the motion commences to be near to instead of far from the subject, and, in fact, the most prominent signification of *upa* is “near”, or “by the side of”. It does indeed also denote “inferiority”, but in a great many cases it approaches nearer to the meaning of ἐπὶ as implying superposition, or indeed position generally. We believe, then, that ὑ-πὸ primarily implies only a motion to the speaker from that which is near to him, the idea of “under” not being in any way directly conveyed by it. But when by the addition of the suffix *-ra* this direction is continued beyond the subject, the ideas of “upper” and “under” arise from the correlation. Ὑ-πὸ, *su-b, u-pa* are related to ὑ-περ, *su-per, u-pari* pretty nearly as positives to comparatives. A similar relation subsists between the Gothic *uf, ufar*: thus in Ulfilas *Mark* iv. 32, ὑπὸ τὴν σκιὰν αὐτοῦ, “under the shadow of it”, is translated “*uf skadau is*”, and *Matth.* x. 24, οὐκ ἔστι μαθητὴς ὑπὲρ τὸν διδάσκαλον, οὐδὲ δοῦλος ὑπὲρ τὸν κύριον αὐτοῦ, “the disciple is not *above* his master, nor the servant *above* his lord”, stands in the Gothic version “*nist siponeis ufar lais-arga: nich skaltis ufar fanim seinamma*”. Now “over” and “under” are both comparatives, the former being, in fact, identical with *ufar*. The simple method of explaining this difference is, to suppose that ὑπό, *sub, u-pa, uf* originally signified “up”, “upon”, like ἐπὶ and *ob*; and then, according to the proper use of the suffix *ra*, ὑπερ, *super, u-pari, ufar* would mean “upper”, as the comparatives of the other set of words. The meaning of the words “over” and “under” is this, that the subject considers himself as a point in a vertical line, every point in the line, reckoning from his feet being considered as “under”, and every point in the line, reckoning from his head, being considered as “over”, so that the subject is the positive, and those two words are comparatives, not in relation to one another, but to him; thus it is, that when the relations of “over”, “under” are expressed by comparative forms, as in English, German and Sanscrit, they contain different roots: for “over”, *über, u-pari* have no etymological connexion with “under”, *unter, antar*. But

“over” and “under” are really opposed to one another; they are relative terms, and are expressed as such, when, as in Greek, Latin, Sanscrit, and Gothic, they stand as positive and comparative degrees of the same word: so that, although “under” is expressed in these three languages by a word signifying “up” or “upon”, it must be recollected that what is “up” in regard to one thing, is “under” in regard to that which is “upper”; just as τό τινι συνελθὸν καὶ ποιῶν, ἄλλω αὖ προσπεσόν, πᾶσχον ἀνεφάνη (Plato *Theætet.* p. 157 A).

The preposition *διὰ* is merely a form of the second numeral: compare *διᾱκόσιοι* for *δια-εκόσιοι*, with *τριακόσιοι*, &c. Accordingly, it generally conveys the idea of “penetrating”, “dividing into two parts”. This idea is manifestly presented to us in the word *δύω* “to penetrate”, which, of course, belongs to the same origin, for in this word the vowel is always wavering between *υ* and *ι*, as we might expect, according as the labial is omitted or vocalized. In *δί-δυ-μος*, a reduplicated form, we have both ways of writing the root. We have remarked before on the Sanscrit *dvimātri*, which stands between *bimater* and *διμήτωρ*. It is from this connexion with the second numeral that *δίζω* is a synonym with *ἀμφισβητέω*. In Latin the numeral adverb *δὲς* is written *bis*, the labial sound being alone retained, but, as a preposition in composition, the Greek form, *δὲς* or *διά*, is retained, the final letter when not preserved being represented either by a lengthening of the *i*, or by an assimilation with the first letter of the word with which it is compounded. Thus the Greek form is preserved in *dis-cedo*, *dis-rumpo*, &c.; it is softened into *r* in *dir-imo* (*dis-emo*); it is assimilated in *dif-fero* (*δια-φέρω*), *dif-findo* (*δια-σχίζω*); and represented by the long *i* in *di-lanio* (*δια-σπάω*), *di-midiis* (*δια-μέσος*, *ἡ-μισυ*), &c. The form in *s* is preserved in Greek but only in one sense; that of separation, weakness, and, consequently, in general opposition to that which is good. In this sense the connecting vowel is *υ* in Greek, though in Latin the form is generally not altered in consequence of this signification. In Gothic *tus* is used in this sense (Grimm II. p. 768); this is because *tvis* is the form of *δὲς* in that language. In *Galat.* v. 20, *διχοστασίαι* is translated *tvis-stasseis*. The extensive use of the preposition or second numeral, call it which you will, in this sense cannot be better shown than by comparing *δυσ-μενής*, with the Sanscrit *dur-manas* (comp. *dir-imo*) and

Persian *dush-men*, which have the same signification. In Latin we have *dif-ficilis* (δυσ-χερής), *dif-famo* (δυσ-φημέω), &c.; and the same prefix appears in French words like *dés-astre*, “evil-stars”, *dés-ordre*, “dis-order” *dés-accord*, “violation of harmony”, &c. Sometimes, as in *bis*, the labial only is represented, as in *ve-cors*, *ve-sanus*. Under the form ζα we have διὰ in an intensive sense, for the same reason that περί, *per* bears that meaning also. Thus ζάχρυσος=διάχρυσος. It is a strong proof of the connexion of this ζα with διά, δís, δύς, that ζα-μενής is generally used as a direct synonym for δυσ-μενής. Compare also διαί-τα with *vi-ta*, on the one hand, and ζωή on the other. Compare also ζεῦγος with *jugum* (*diugum*), Ζεύς (gen. Διός), *Ju-piter* (*Diu-pater*), &c. The dental alone is retained in some words, as in δά-σκιος=ζα-σκιος (διάσκιος), and διὰ itself is used in this sense uncompounded with any word. *Iliad* XII. 104, ὁ δ' ἔπρεπε καὶ διὰ πάντων. In Sanscrit this preposition also assumes the form *vi-*, like the Latin *bis*, *ve*, as well in the more original signification of disjunction or separation (thus *vi-yóktun*, *disjungere*), as with this intensive meaning (thus *vi-mahat*, “very great”).

The preposition σύν, ξύν, always signifying “in conjunction with”, does not require much discussion. There can be no question about its connexion with the Sanscrit preposition *sa*, and consequently with the demonstrative stem *sa* (Grimm II. p. 1018). We have the former in ὁμοῦ, ᾄμα, *simi-lis*, *sem-per* (the last part of which is the Sanscrit *vâra*, Persian *vâr* “time”; compare *Septem-ber*, &c. Bopp, *Vergl. Gramm.* p. 436): we have the latter in σα-φής, from σα and φῶς (compare εὐ-γενής from γένος, ἄ-σθενής from σθένος), and probably, though in a mutilated form, in such words as ᾄ-λοχος (σά-λεχος “same-bed”), ᾄ-δελφος (σά-δελφός “same-womb”), &c. (Bopp, *über der Einfluss de Pronomina*, p. 10). The Latin *cum* is of course connected with ξύν = κσύν as κοινός is with ξυνός, and the Gothic *ga* is another form of the Sanscrit *sa* (Grimm II. p. 751).

Like σύν the preposition μετὰ signifies “conjunction” when followed by a genitive case, but when found with an accusative it denotes “after”. Fortunately, it will not be difficult to explain this. Συν (συ-μ), *sa-ma*, is obviously a compound of two pronominal roots, the one belonging to the third person, the other to the first. Consequently, while the full force of the two ele-

ments was perceptible the word expressed a conjunction of the *there* with the *here*, and this was the simplest form in which the mind of man could conceive an union. Just so, *με-τά* was a compound of the same two pronominal roots, that of the first person being, however, put foremost; thus, although the idea of an union in general was still conveyed by the word, this idea was combined with that of a motion from the *here* to the *there*, and it is in this sense that *μετά* signifies “after,” when joined with the accusative, the case of motion. But, even with the accusative, the idea of junction or continuity is retained. Thus we have *μεθ’ ἡμέραν* “in the day-time” (Eurip. *Orest.* 58), *μετὰ νυκτᾶς* “in the night” (Pind. *Nem.* VI. 12). The Homeric *μέ-σφα*, a synonym for *μέχρι*, is used with the genitive in the sense of “until” (*Iliad*, VIII. 508). This word is a compound of the first and second pronominal roots, just as *με-τά* is of the first and third. It has no affinity with *μέχρι*, which is connected with *μακρὸς* as *ἄχρι* is with *ἄκρὸς*. *Μετὰ* is found as *mit* in German, by a mutilation not unlike that of *σύν* (*σύμ-*), *cum*, from *sa-ma*.

The preposition *κα-τά* is a form perfectly analogous to *με-τά*. The first part is, as we have seen, the second pronominal stem under the form *κα*. On this element Bopp makes the following remarks (*über den Einfluss*, &c. p. 5): “*κατὰ* appears to be of a relative nature, like the Latin *qui*, in such phrases as *κατ’ ἀξίαν*, *κατὰ γνώμην*, where *κατὰ* would be translated, in Sanscrit, by the relative adverb *yathā*, ‘as,’ ‘like,’ which forms an adverbial compound with the following substantive; thus *yathā-kāmam*, *yathā-vidhi*. In phrases like *καθ’ ἑνα*, *καθ’ ἑπτα*, it corresponds to the German *je*, the pronominal signification of which is obvious. We may often translate *κατὰ* very properly by (*wie*), ‘like,’ ‘as,’ e. g. *πατέρα.....εὐρήσεις, οὐ κατὰ Μιθραδάτην*, &c. ‘not like M.’ *κατ’ ἑμαυτόν*, ‘like myself,’ *οἱ καθ’ ἡμᾶς*, ‘those like us,’ *οἱ καθ’ ἑαυτόν*, ‘those in the time in which he was,’ *μείζων ἢ κατ’ ἄνθρωπον*, ‘greater than like a man’ (*grösser als wie*). In general, the relative nature of *κατὰ* shows itself, more or less, wherever it is construed with the accusative; it is worthy of remark, too, that the Semitic prefix *ka*, the primitive of which is ‘as,’ ‘like,’ (*wie*), corresponds with *κατά cum accusativo* (‘in consequence,’ ‘according to,’ ‘nearly,’ before numerals, and so forth). With the genitive *κατὰ* is more of a demonstrative nature, and ‘un-

der' is related to the opposed 'over' as this-side (*diesseits*) is to that side (*jenseits*), *citra* to *ultra*. In respect to the form, *κατὰ* appears to be a relict of the primeval period of language, a property derived from the original abode, and not formed according to the principles of the Greek language itself in its present state: the Sanscrit, too, has a form which exactly corresponds to it: namely, *katham*, 'how'? to which, in respect to the omission of the nasal, *κατὰ* stands related as e. g. the accus. *πόδα* to the Sanscrit and Latin *padam*, *pedem*. With the exception of *katham*, there is only one pronominal-derivative with the suffix *tham*, namely, *it-tham* 'thus.' Besides this, however, there is a cognate suffix *tha*, which occurs in only one pronominal formation, namely, in *a-tha*, which signifies 'but,' 'then,' 'after this,' 'hereupon,' and with which the Greek *εἰ-τα* is perhaps connected, with the introduction of an *ι*, just as the interrogative stem *ka* has also assumed a similar form in the compound *κεῖ-νος*, and in the adverbs *κεῖ-θι*, *κεῖ-θεν*."

These remarks contain the germs of a true explanation of *κα-τὰ*, though Bopp has, in some measure, begun at the wrong end. The relative meaning of the element *κα*, like all subordinate meanings of pronouns, springs from its originally demonstrative force. As a demonstrative this pronoun expresses a position *near* to the subject; it is this idea of *nearness* which constitutes the relatives, reflexives, indefinites, interrogatives; it is this which generates the idea of relation in general: for what is relation but a sort of juxta-position? The word *ci-tra* which he mentions, gives the real idea of *κα-τὰ*, though a little more strongly. The Sanscrit *katham* does not correspond to *κατὰ*, but to *πόθεν*, *κόθεν*; and the termination *-tha* in *a-tha* is that found in *ἐν-θα*, &c. The termination of *κα-τὰ* is merely the third personal pronoun, which constantly makes its appearance in the Greek language either by itself or in pronominal compounds.

In order to understand properly the various uses of *κατὰ*, we must consider it in immediate connexion with *ἀνά*, which is found as its equivalent or counterpart in almost every one of its significations. Thus, if we have *κατὰ τὸν πόλεμον* (Herod. VII. 137), we have also *ἀνὰ τὸν πόλεμον τοῦτον* (Herod. VIII. 123) with but a slight difference of meaning: we have both *ἀνά στρατόν* (Eurip. *Phæniss.* 1309), and *κατὰ στρατόν* (*Iliad* vii. 370): and both *ἀνά* and *κατὰ* are used with numerals to

give them a distributive signification. As counterparts, *ἀνά*, *ἄνω* are used to signify “up,” “motion up;” *κατά*, *κάτω*, “down,” “motion down.”

If we analyze *ἀ-νά* more minutely, and compare it with *κα-τά*, we shall arrive at a satisfactory explanation of their correlative use. The first part of *κατά*, that which designates the point where the motion or direction commences, implies nearness; the second part indicates simple position or *there*. The direction implied is therefore one beginning near us, and proceeding to a point not necessarily distant. In *ἀν-ά*, on the contrary, both words imply distance, but still a direction is signified; therefore, *ἀνά* must denote a direction of which both the first and last points are distant, though it may be a line parallel to that denoted by *κα-τά*. And thus we find that *ἀνά* and *κατά* may be used in a similar way with the accusative, that is when direction or extension is implied, according as we suppose, for the moment, that the direction or extension is near or far¹. But, when they are used with cases which imply fixedness or position, the first syllable is alone considered, and that is, in *κα-τά* a word denoting nearness, in *ἀ-νά* a word denoting distance: but *up* and *down* are conceived as *distant* and *near* respectively; therefore, when a point is implied, *ἀνά* means up and *κατά* down.

The preposition *ἀνά* occurs, either separately or as a prefix, in almost every language of the Indo-Germanic, and there are few words which have more varied functions to perform. To begin with the Sanscrit *ana*, there can be no doubt that this is a compound pronoun made up of the two pronominal stems, *a*, which we have mentioned above, and *na*, which occurs separately in Pâli, but only as a termination in Sanscrit and Zend (Bopp *Vergl. Gramm.* p. 531). It appears in Latin, in the words *nam*, *e-nim* (Bopp *Vergl. Gramm.* p. 534), *num*, *nun-c*, *ně*, *nē*, *nĩ*, *nī*, *non*; in Greek in the words *νν*, *νὺν* (compare *σν-ν*, *sa-m*), *ναί*, *νή*, *νη-*, &c. It is to be remarked that both parts of the Sanscrit word *a-na* are used as negative prefixes, and so is the whole word: thus *anapakâra* “harmlessness,” “freedom from

1. And thus *κα-τά* signifies “on a line with,” in defining geographical positions, where a certain degree of proximity is necessarily implied (see Long’s *Summary of Herodotus*, p. CXLVIII). In Herodotus

(II. 75) we have three words, from this same root, used in designating the relative position of a certain spot in Arabia. -κατὰ Βουτοῦν πόλιν μάλιστα κη κείμενος.

hatred and malice," is compounded of *ana* and *apakâra* "evil doing." The same is the case with the Greek *ἀνά*. We have both *a* and *να* or *νη* as negative prefixes, and we have *ἀνά* so used as a prefix, and separately in the form *ἀνεί* with a very similar signification. That the use of the separate parts of the word in the same way as the whole word is used cannot be looked upon as occasioned by mere abbreviation, as is the case with the modern Greek *δεν* for *οὐδέν*, appears from the fact, that *a* is found with the same privative meaning in other particles besides *ἀνά*, thus we have *ἀ-πό* (*ἀ-ψ*), *ἄ-τερ* (a comparative form), &c.; also in the Sanscrit *a-pa* and *a-va*; and with regard to *-να* we must remark that the primitive meaning of this stem is sufficient to account for its negative use without assuming that when so used it is merely an abridgment of *ἀ-νά*. We have before pointed out the idea of separation, removal, distance, conveyed by the words *νιν*, *νός-φι*, *νός-τος*, &c.; this power of the element *-na* is so forcible, that when appended to the element *ka*, which is the strongest expression of proximity, it converts it into a pronoun (*κεῖ-νος*), denoting distance in a very marked manner. It is to this same idea of distance that we owe the meaning of negation contained in *να*, for after all, what is a negation but an expression of farness or removal? and what way of negating have we in our own language more decided than the common "far from it"? It is on this account that we also find *ἀπό* with a negative meaning both in Greek and Sanscrit. Thus the word *apa-kâra*, composed of *apa* "from" and *krî* "to make," signifies "evil-doing," "injury," in perfect analogy with the Greek *οὐδέν ἄπο τοῦ ἀνθρωπείου τρόπου πεποιήκαμεν* (Thucyd. I. 76). It is this use of *ἀπό* which has given occasion to the employment of *ἀποκαλέω* in a bad sense: thus Soph. *Aj.* 727, *τὸν τοῦ μανέντος κάπιβουλευτοῦ στρατοῦ ξύναιμον ἀποκαλοῦντες*, "calling him by way of abuse". Aristoph. *Aves*, 1263, *ἀποκεκλήκαμεν διογενεῖς θεούς* (unless we ought to read *ἀποκελήκαμεν*). Xenoph. *Mem.* I. 2. § 6, *τοὺς δὲ λαμβάνοντας τῆς ὁμιλίας μισθὸν ἀνδραποδιστὰς ἐαυτῶν ἀπεκάλει*. I. 2. § 57, *ἀργοὺς ἀπεκάλει*. I. 6. § 13, *σοφιστὰς ὥσπερ πόρνους ἀποκαλοῦσιν*. Plato *Gorg.* p. 512 c, *ὡς ἐν ὀνείδει ἀποκαλέσαις ἂν μηχανοποιόν*. *Theætet.* p. 168 d, *χαριεντισμὸν τινα ἀποκαλῶν*, which Schleiermacher properly translates "nannte er nicht dies einen *schlechten* Scherz"; Demosth. *Fals. Leg.* 47, *λογογράφους τοίνυν καὶ σοφιστὰς ἀπο-*

καλῶν: Aristides Tom. II. p. 383, ἀποκαλεῖν ἀλάζονα. The word ἀ-νά is, then, a compound of two elementary roots, both signifying removal or farness, and is therefore, according to the principles which regulate the formation of compound pronouns, a stronger and more definite expression of the same signification. The meaning “up”, with which ἀνά is so often found, is only another modification of the same idea, for highness and farness are related notions. This is shown by the word ἀνεκάς, which we conceive is a compound of ἀνά and ἐκάς, although Döderlein supposes that it is formed from ἀνά as περιῖξ is from περί, and is related to ἐκάς in sound only (*De ἄλφα intensivo* p. 12). Böckh has endeavoured to show (*Notæ Crit. in Pind. Olymp. II. 23*) that ἀνεκάς always means “upwards”. Plutarch says that the Attics used ἀνεκάς for ἄνω, and ἀνέκαθεν for ἄνωθεν (*in vita Thesei*, cxxxiii). The Scholiast on Aristophanes (*Vesp. 18*) says, ἀνεκάς δὲ ἀντὶ τοῦ ἄνω, πάνυ ἐκάς καὶ εἰς ὕψος, which we believe to be a correct statement; the word implies both height and distance, as in the line of Pherecrates emended by Valckenaer (*Diatrib. in Eurip. p. 285*), τουτὶ τί ἐστίν; ὡς ἀνεκάς τὸ κρίβανον: and this is also implied in the passage of Pindar on which Böckh is commenting, ὅταν θεοῦ μοῖρα πέμπη ἀνεκάς ὄλβον ὑψηλόν, i. e. πέμπη ἀνεκάς ὥστε ὑψηλὸν εἶναι.

If ἀ-νά, ἀ, and να are all used in a negative sense, it is equally remarkable that they are all three used in an intensive sense. Of the uses of ἀνά and ἀ in this sense it is unnecessary to give examples; Döderlein, we think justly, considers νηγάτεος (ἀγαθός), νήδυμος (ἡδύς), νηλιτής (ἀλιτής), νηπεδανός (ἡπεδανός), νητρεκῶς (ἀτρεκῶς), νήχυτος (πολύχυτος), νωλεμές (εἰλεῖν, comp. οὐλαμός), to be instances of the intensive signification of νη (*De ἄλφα intensivo* p. 21 foll.).

The prefix ἀ is also used in a collective signification, but then it is only a corruption of ἅ, Sanscrit *sa*, and of course does not belong to the root now under discussion.

Some people used most absurdly to imagine that the intensive *a* is a shortened form of ἄγαν, the first syllable of which is this same pronominal stem. Döderlein attempts to reconcile the negative and intensive uses of ἀ as follows (*De ἄλφα intensivo*, p. 24). “I consider that by a sort of abuse the proper force of a privative has been turned into an expression of *excess* (*nimietas*); just as in those words in which *a* is put for δυς; for the *de-*

pravation of a thing is nearly the same as its *defect*, and *excess* is nearly the same as *depravation*. Thus, among the Greeks, ἀπάλαμος is, in Homer, he who is *without* skill, in Pindar, he who makes a *bad use* of his skill; and in German, *Unlust* is used in a privative sense, *Unstern* in a depravative sense, and *Unstier* in an exaggerative and intensive sense. If *greatness* lies between *immensity* and *littleness*, immense and little things are alike excluded from the category of greatness." Bopp endeavours to connect the privative signification of this particle with the temporal augment (*Annals of Oriental Literature*, p. 27): "What the *a*, prefixed to (Sanskrit) verbs in order to form a preterit, originally signified, I do not know, but this I know, that it is prefixed in the same manner to nouns with the sense of a negative and privative particle; for instance, *adīna*, happy (not miserable), *anindita*, dear (not despised), *abala*, weak (without strength), &c. It would not by any means be contrary to the general practice of languages, if by the words *adīna*, *anandita*, exceeding the primary sense of the negative particle *a*, the Sanscrit had also signified one *who has been miserable, who has been despised*—but who is not now miserable, not now despised; in that case there might have been a closer connexion between *a* negative and *a* preterit, than would be evident at first sight; or, in other words, the particle *a* expressing in its primitive sense negation, can very properly in a secondary sense indicate past time, that is to say, deny the existence of the action or quality with respect to the present time. One might ask why in this way *a* is not as well employed to form the future tense, for neither in this tense does the action or quality expressed by the verb, actually exist: but the usage of language is despotic, arbitrarily employing its means without controul. Another objection could be taken against the original identity of the negative *a*, and the *a* expressing past time, from the case of the first being employed in Greek under the form of *a*, the second under that of an *ε*, so that different forms answer to different meanings. But it is very often the case, that one original word produces, in languages originating from others, two, three, or more words, with slight variations in form and meaning; and this practice has particularly contributed to the copiousness of the English language. For instance, to *stay* and to *stand* have the same origin, both are

variations of the Sanscrit root *sthâ* to stand. *I stay* agrees with the German verb *ich stehe*, signifying 'I stand,' of which the preterit is, *ich stand* (I stood), which is considered as a new root in English." In our opinion the negative and intensive significations of *ἀ* are alike due to the notion of "farness" which we have pointed out as the primary one of *α*, *να*, and *ἀνά*, and if it be necessary to suppose, what is indeed not improbable, that the augment *ε* is the same as the prefix *α*, this may also be explained in the same way, for the idea of distance is at the bottom of that of past time.

As *ἀνά* is used negatively, so is *κατά* used affirmatively. But in this case, at least in composition, the opposite of *κατά* is often *ἀπό*: thus, *κατά-φημι*, "to say yes," *ἀπό-φημι*, "to say no." As opposed to *κατα-νεύω*, "to express assent by nodding," we have both *ἀπο-νεύω* and *ἀνα-νεύω* with the contrary signification. The simple *ἀ-* was also a direct opposition to *κατά*, as Thucydides tells us in direct terms (I. 123): οὐ γὰρ δὴ πεφευγότες ταῦτα ἐπὶ τὴν πλείστους δὴ βλάβασαν κατα-φρόνησιν κεχωρήκατε, ἢ ἐκ τοῦ πολλοῦ σφάλλῃν τὸ ἐνάντιον ὄνομα ἀ-φροσύνη μετωνόμασται.

But by far the most important of the correlative uses of *ἀνά* and *κατά* is their appearance in an abridged form as *ἀν* and *κέν*, with much the same functions to perform. That the *ἀν*, which appears in conjunction with verbs, expressing the apodosis of a condition, is in reality the preposition *ἀνά*, appears clearly enough from the use of that preposition in the old poets under the same form (Böckh *Not. Critt. in Pind.* p. 387). It is also sufficiently obvious from the use of the prepositions, *ἀν-τι*, which bears the same relation to *ἀνά* that *προ-τί* does to *πρό*, and *ἀμ-φί*, which stands for *ἀναφί*, as *ἄμφω* does for *ἀνα-φω* = *ἀνα-δῶ*. It is altogether a matter of indifference whether we regard *ἀ-ν* as the locative of the mutilated pronoun *ἀ*, or consider the *ν* as part of the suffix *-να*, for the *ν* of the locative is simply this suffix in a mutilated state.

The identity of the preposition *ἀνά* and the particle *ἀν* was some years ago recognized by Hermann, who, in his laborious treatise on the particle *ἀν* (*Opuscul.* Vol. iv.), explains the use of the particle from the sense of *secundum* "according to" in which *ἀνά* is found; thus, he says, *ἐβουλόμην ἀν εἰ ἐδυνάμην* is equivalent to *ἐβουλόμην ἀνά τοῦτο εἰ ἐδυνάμην*.

He connects *κεν* with *καί*, on the ground that *ὅς κε θεοῖς ἐπεπείθηται* is equivalent to *ὅς καὶ θεοῖς ἐπεπείθηται*. With regard to the meaning of the particles *ἄν* and *κέν*, he thinks that these two words, like *ἴσως*, *πού*, and *τέ*, are only so many modifications of the idea of probability. There is no doubt that Hermann is right in comparing *κεν* with *καί*. We shall show in the next chapter that not only *καί*, but *τε* and *πού*, in which he recognizes a similarity of meaning, are etymologically connected with *κεν*. It was not, however, remarked till very lately, that *κέν* was also connected with the first syllable of *κατά*, and that the first syllable was actually used by the older Greeks instead of the more lengthened form in which the preposition appears in the classical authors. This was first suggested, so far as we know, by Adolfus Weber, Professor of Mathematics in the Gymnasium, at Torgau, who has shown that *κατὰ* is shortened into *κά*, not into *κάτ*, and that *κάτ* has arisen more from usage than from the nature of the case. Welcker, in his notice of Weber's pamphlet (*Rheinisches Museum* for 1835, p. 638), has given an instance of the use of *κά* for *κατὰ* from an inscription of the 69th Olympiad (in Chishull *Antiq. Asiat.* p. 49), where we have ΕΖΗΤΗΣΕ ΤΑΣ ΠΟΛΕΙΣ ΤΑΣ ΚΑ ΤΗΝ ΣΕΛΕΥΚΙΔΑ. Weber therefore infers the derivation of *ἄν*, and *κά* (*κέ*), from *ἀνά*, *κατά*¹, which is unquestionably true, as will appear from the following considerations.

It is in accordance with all that we know of the origin of prepositions, to suppose that they would naturally and necessarily be used by themselves as cases of pronouns before they were employed as supplements to the cases of nouns, when those cases had, by the mutilation of their endings, lost their original significance. We find remains of this use not only in classical Greek, but even in modern French and Italian. In the former we find almost all the prepositions used in their primary sense as adverbs of place: thus we have *ἐν*, "at the same time" (Sophocl. *Æd. Tyr.* 27); *ἐπι* "in addition" (*Æd. Tyr.* 183, *ἐν δ' ἄλοχοι, πολιαί τ' ἐπι ματέρες. Antig.* 789, *καί σ' οὐτ' ἀθανάτων φύξιμος οὐδείς, οὐθ' ἀμερίων ἐπ' ἀνθρώπων*);

1. *De κατὰ Præpositionis Apocope, scr. Ad. Weber, Gymnasii Torgovani Subconrector et Disciplinæ Mathem. ac Physicæ Doctor.* 1835. We regret exceedingly

that we have not been able to procure this little essay, and that our knowledge of it is confined to the short article in Welcker's review mentioned above.

πρός, “in addition” (Plato *Resp.* p. 466 E. καὶ πρὸς γε ἄξουσι, Demosth. *Philipp.* I. p. 47, τάλαντα ἐνενήκοντα καὶ μικρόν τι πρὸς); or even two at once in Homer, as in *Iliad* v. 66, ἡ δὲ διὰ πρὸ ἀντικρὺ κατὰ κύστιν ὑπ’ ὅσπερ ἦλυθ’ ἀκωκή. That κα-τὰ and ἀ-νὰ are also used in this way is well known: thus we have in Herodotus (I. 208): ἡ μὲν δὴ ἐξαναχώρεε, κατὰ ὑπέσχετο πρῶτα, and (III. 86): οἱ ἕξ, κατὰ συνεθήκαντο, παρήσαν ἐπὶ τῶν ἵππων:—and in Homer (*Iliad* xviii. 562): μέλανες δ’ ἀνα βότρυνες ἦσαν. In Italian and French the prepositions *ne* and *en*, both signifying “in”, are used as general adverbs of relation with the meaning “of this,” “from this,” “with regard to this.”

Although ἀν may be considered as essentially the same with the preposition ἀνά, its correlative κά, κέ, κέν, always appears without the element of the third pronoun, which is subjoined to κα-τά, and is moreover used as an enclitic or unaccented and dependent word. This need not create any difficulty. We have already mentioned that, when κα-τὰ signifies “down” as opposed to “up”, the stress is laid entirely upon the first syllable, which designates the point at which the direction commences, and declares that point to be in the proximity of the subject. We have also seen that this syllable alone is retained even in cases when the meaning is not “down” but “along” or “in”, as in the inscription quoted from Chishull by Welcker. In the opposition, therefore, of κέν to ἀν, considered as an opposition of “near” to “far”, of antecedent to consequent, of protasis from apodosis, we should expect, not merely that they would use that syllable alone which conveyed the meaning “here” as an antithesis to ἀνὰ, but also that a shorter, more dependent, and subordinate form would be used for the first sentence, as opposed to a stronger and more decided one employed for the latter member of the period. The use of ἀν and κέν, like that of all the other particles in Greek, is a proof of the early tendency and striving of that language after clearness of logical expression. It is true that the moods of verbs, as well as the cases of nouns, are capable of expressing, without any outward helps, all the necessary modifications of meaning. But they cannot do this with sufficient distinctness, even when they retain the full force of their inflexions; and when, in process of time, the ending is overbalanced by the body of the word, or sacrificed to

the laws of euphony, it becomes impossible to express the different local relations or cases of nouns without prepositions, and the different modal relations of verbs without particles, to designate the dependence or subsequence of the secondary sentences. One of the great beauties of the Greek language, as it stands, is its frequent use of particles or pronominal words for this purpose, but none of these particles is used with more efficacy than those two fragmentary prepositions of which we are now speaking. The older Greek writers used both *ἀν* and *κεν* to express the apodosis of an hypothesis or condition: the later authors employed only the former. According to what we have stated above, *κεν* would, if not an enclitic, mean "in this," and *ἀν* "in that." As, however, *κεν* is but a dependent word, it stands on the same footing as *τε* and *τι*, *που* and *πως*, which are all etymologically connected with it, and signifies "in some place or other," "in any way," and, by implication, "perhaps." The relation between *τε* and *καί*, though the former is enclitic and the latter accented, may appear to be not altogether the same as that which subsists between *κεν* and *ἀν*; for the two former words are of cognate origin, while the two latter belong to entirely different pronominal stems. Yet the correlation in each case is so nearly the same, that the two pairs of words may properly be placed by the side of one another. When we find *τε* in the first sentence, and *καί* in the latter, which is the common construction, the meaning conveyed is, that what is affirmed generally (*τε* = "in any way") of the former, is affirmed in the same way in the latter (*καί* = "in this"). When *τε* appears in both sentences, the meaning is, that what is affirmed in *any* way of one is predicated in *some* way of the other. Similarly, we should expect (1) that *κε* would appear in the hypothesis and *ἀν* in the apodosis, with this meaning—if such were "in any way" (*κε*) the case, then "in that case" or "farther" (*ἀν*) such things would follow: or (2) that *κεν* would appear in both, with this sense—if such were "in any way" the case, then "in some way" such things would ensue. We frequently find both of these constructions in the Epic and Lyric poets, as in the following examples; (1) Homer *Odyss.* viii. 353; *πὼς ἀν ἐγὼ σε δεόμι μετ' ἀθανάτοισι θεοῖσιν, εἴ κεν Ἄρης οἴχοιτο, χρέος καὶ δέσμον ἀλύξας*; Pindar *Nem.* IX. 34; *Χρομῖω κεν ὑπασπίζων—ἐκρινας ἀν κίνδυνον ὀξείας αὐτᾶς*.

(2) Homer *Iliad* vi. 50, τῶν κέν τοι χαρίσαιτο πατήρ ἀπερείσι' ἄποινα, εἴ κεν ἐμὲ ζῶν πεπύθοιτ' ἐπὶ νηυσὶν Ἀχαιῶν. Hesiod. *apud Aristot. Eth.* V. 5, εἴ κε πάθοι τά κ' ἔρεξε, δίκη κ' ἰθεία γένοιτο. There appears to be a particular attraction of the indefinite κέν into the protasis, as might be expected from the generally vague nature of hypothetical sentences. Even ἂν is appended to relative, or, what is the same thing, hypothetical words in the Attic dialect; thus, we constantly have εἰάν, ὅταν, ὅς ἂν, &c.: and κεν seems to have been similarly appended to the conditional particle by the Cretans, as we may infer from the gloss on βαῖ-καν = Φαί-καν, in Hesychius, and from the Doric collocation αἴ-κα. In Homer and Pindar we often find κε in the hypothesis without any corresponding κε or ἂν in the apodosis. Thus, in *Iliad* xix. 321, οὐ μὲν γάρ τι κακώτερον ἄλλο πάθοιμι, οὐδ' εἴ κεν τοῦ πατρὸς ἀποφθιμένοιο πυθοίμην. Pindar *Pyth.* IV. 263, εἴ γάρ τις ὄξους ὄξυτόμῳ πελέκει ἐξερείψαι κεν μεγάλας δρυός, αἰσχύνοι δέ οἱ θαητὸν εἶδος, καὶ φθινόκαρπος ἐοῖσα διδοῖ ψᾶφον περ' αὐτᾶς,—where, however, καὶ stands as a sort of substitution for the κεν which might have appeared in the apodosis. The fact is, that the hypothetical particle, in its older and stronger form, is itself a relative word, as will be shown in the following chapter, and even εἴ, which is generally its representative, and is more immediately connected with ἵ, in which the idea of nearness is not so strongly expressed, may always be referred both in origin and meaning to the second pronominal element.

As there are instances in which καὶ appears in the first of two correlated sentences, and τε in the second, the enclitic κεν might occasionally be expected to appear in the second sentence in opposition to ἂν in the protasis: the instances of this construction must be very few; the only example, with which we are acquainted, is in Pindar, *Nem.* VII. 89: εἴ δ' αὐτὸ καὶ θεὸς ἂν ἔχοι, ἐν τίν κ' ἐθέλοι—εὐτυχῶς ναίειν. It would be better, however, to read ἀνέχοι, with Thiersch and Böckh, for the meaning clearly is—"if a God would condescend to, would put up with, would not disdain, the law of good neighbours," a sense which ἀνέχω bears in Euripides, *Hecuba*, 119; Κασσάνδρας ἀνέχων λέκτρ' Ἀγαμέμνων, and Sophocles, *Ajax*, 212, ἐπεὶ σέ, λέχος δουρίαλωτον, στέρξας ἀνέχει θούριος Αἴας.

One of the best proofs of the correctness of this view, with regard to the meaning of ἂν and κέν, is the place which these

particles occupy in the sentence. Neither of them can appear as the first word, but they are always placed in immediate connexion with the conditional word when they appear in the protasis, and in that part of the apodosis, in which the reference to the hypothesis is most distinct and prominent. The formation of the compound conditional particles βαίκαν, αἶκα, εἰάν, ὅταν, &c. is a sufficient proof of the attraction of κέν and ἄν to the conditional words: the following will serve as instances of the mode of placing ἄν in the apodosis. When there is no reason for its appearing in other positions, ἄν always follows the predicate: thus, Sophocles, *Ajax* 550, ὦ παῖ, γένοιο πατρός εὐτυχέστερος, τὰ δ' ἄλλ' ὅμοιος· καὶ γένοι' ἄν οὐ κακός. Here is a wish expressed by the first γένοιο, and the second signifies the result of a condition; in the opposition therefore of the two repeated words, the ἄν should immediately follow the second: "may you be, &c., and you will be *in that case*, &c." But in the following passage, where there is a similar opposition of the optative proper to the optative with ἄν, the antithesis is between the two negatives, not between the two verbs, and therefore the ἄν appears immediately after the direct negative οὐ, to which the indirect μὴ is strongly opposed; Sophocles *Antigon.* 686, οὐτ' ἄν δυνάμην, μήτ' ἐπισταίμην λέγειν. "I should not even in this (i. e. if I knew how) be able, and I pray that I never may know how to say, &c." The negative οὐ, and the cognate particle οὖν, exercise an attraction upon ἄν in the apodosis similar to that which it experiences in the protasis from the relative and conditional words. Thus, we very often find the collocations οὐκ ἄν, οὐδ' ἄν, οὐτ' ἄν, οὐποτ' ἄν, &c., and ἄν is often drawn away from its verb by the influence of οὖν: compare Demosthen. *Olynth.* I. 13, τί οὖν ἄν τις εἴποι ταῦτα λέγεις ἡμῖν νῦν; *Olynth.* III. 14, τί οὖν ἄν τις εἴποι σὺ γράφεις ταῦτ' εἶναι στρατιωτικά; Plato *Sympos.* p. 202 D, τί οὖν ἄν, ἔφην, εἶη ὁ Ἔρως. The reason for this is obvious; the particle οὖν refers directly and specially to what has preceded, and the particle ἄν must of course have the same reference in questions like those we have quoted. In general, whatever word in the apodosis is to be expressed with most emphasis in reference to the conditional sentence, whether that conditional sentence is expressed or understood, this word is followed by ἄν: Herodotus III. 119, πατρός δὲ καὶ μητρός

οὐκ ἔτι μεν ζώντων, ἀδελφεὸς ἂν ἄλλος οὐδενὶ τρόπῳ γένοιτο. Thus also qualitative adverbs, like ἡδέως, εἰκότως, τάχα, μάλιστα, &c., on which the emphasis always falls, are invariably followed by ἂν unless some other word with a stronger attractive power appears in the sentence: Plato *Protagor.* p. 318 A, ἡδέως ἂν φησι πυθέσθαι. As words expressing opinion about or information on a subject have all the effect of qualifying adverbs, we find that they also attract the particle into their immediate neighbourhood: Plato *Phædo* p. 101 E, σὺ δ' εἶπερ εἰ τῶν φιλοσόφων οἶμαι ἂν ὡς ἐγὼ λέγω ποιοῖς. It is prefixed to the word of thinking when the emphasis falls upon a word before it, as in Plato *Respublica*, I. p. 333 A, πρὸς γε ὑποδημάτων ἂν οἶμαι φαίης κτήσιν, or if a relative word precedes, as in Thucydides I. 22, ὡς δ' ἂν ἐδόκουν ἐμοί—τὰ δεόντα μάλιστα εἰπεῖν, or οὐκ, as in the same author, II. 89, οὐκ ἂν ἡγοῦνται-ἀνθίστασθαι ἡμᾶς. The most curious and most frequent instance of this hyperbaton is the intrusion of ἂν, which belongs to an optative following, into the phrase οὐκ οἶδ' εἰ, = *vereor ut*. Euripides has οὐκ οἶδ' ἂν εἰ πείσαιμι in two passages (*Medea* 911, *Alcestis* 49), but it is clear that the necessities of the metre have obliged him to misplace the particle which certainly ought to follow the negative, as appears from Plato *Timæus*, p. 26 B, ἐγὼ, ἃ μὲν χθὲς ἤκουσα, οὐκ ἂν οἶδ' εἰ δυναίμην ἅπαντα ἐν μνήμῃ πάλιν λαβεῖν, and from the somewhat similar passages in Demosthenes, *de Fals. Legat.* p. 441, 21, οὐδ' ἂν εἰς εὖ οἶδ' ὅτι φήσειεν, and *Proæm.* p. 1423, 14, οὐδὲν ἂν τὰ ὑμέτερ' εὖ οἶδ' ὅτι βέλτιον σχοίη. The ἂν appears unattracted in Aristoph. *Aves*, 1018, οὐκ οἶδά γ' εἰ φθαίης ἂν.

The particle κέν is distinguished from ἂν by its tendency to assume an early place in the sentence. It is put before many words to which ἂν is regularly subjoined; thus, as Hermann justly remarks (*Opuscul.* IV. p. 7), if Syagrus (Herodotus VII. 159) had not been desirous of making a line ἦ κε μέγ' ὠμώξειεν ὁ Πελοπίδης Ἀγαμέμνων in imitation of Homer's ἦ κε μέγ' οἰμώξειε γέρων ἱππηλάτα Πηλεύς (*Iliad* vii. 125), he would have said ἦ μέγα ἂν ὠμώξειεν.

CHAPTER IV.

THE NEGATIVE AND OTHER PARTICLES.

IN the last chapter we were led, by an investigation into the origin of the prepositions *ἀνά* and *κατά*, to make some remarks as well on the particles *ἀν* and *κέν*, as on the negative uses of the word *ἀ-νά*, and its component parts. We shall commence our inquiries in the important subject of the Greek particles in general, by a reference to what we said there, as a natural introduction to the extensive question about the words which express interrogation, negation and inference, which, we shall find, are all connected in the Greek and cognate languages.

Grimm, at the end of the third volume of his great work, has discussed this question with that extraordinary diligence and learning which he everywhere displays. We refer our readers to what he says with the greater pleasure, as this part of his work has been rendered accessible to the English reader, and commented on, by a scholar of considerable ability (*Philol. Museum* II. p. 315 foll.). We shall make the German philologer's inquiries the basis of our own on the present occasion, for, although we do not think that he has seen the general principle by which all the phenomena are to be explained, and although he has in consequence fallen into some particular errors, such are his learning and indefatigable industry that we could not hope to add much by our own researches to the vast induction of particulars which he has collected and arranged.

He commences by stating (III. p. 708) the distinction between a negation and an opposition; the latter includes the former but not *vice versâ*. "The essence of the proper negation consists in the logical denying of a position. By the expression *not mountain*, *not good* the position *mountain*, *good* is excluded, but it is left indefinite whether the opposite *valley*, *evil*, or the intermediate notion *plain*, *middling*, is to be supplied." He adds "*All negation proceeds from the grounds of the position*

and presupposes it. The position is independent, the negation necessarily refers to a position, and cannot be expressed as any thing new, but merely as a modification of the position. This modification results from an *insertion* in the positive position, which insertion in the first instance consists of the smallest possible *particle*, producing an effect both rapid and sure. By degrees, however, this negative particle is usually connected very closely with other words. Along with it we often find substantives that strengthen the sense, which can even take the negating power from it to themselves." He then divides the simple negation in the Teutonic languages into two kinds—the consonant-form and the vowel-form. The fundamental letter of the consonant form is N. Thus, in Gothic it was *nē*, in High German *nein* = *ni-ein* (so *non*, anciently *nenum*, from *ne-unum*), and in old English *ne*. The German *nicht*, English *not*, are compounds signifying *no-thing*; compare the old High German *nēowiht*, *niowicht*, *nieht*; middle High German *nicht*, *niht*; Anglo-Saxon *nāviht*, *nāuht*, *nauht*; English *nought*, *not* (*Phil. Mus.* II. p. 326). Of a similar formation is the Latin *nihil* = *ne-hilum*. The English *no* is a compound of *ne*, and the Anglo-Saxon *ā* (Gothic *ai*, *aio*, comp. *aiFai*, *aevum*) which signifies *always*; *ev-er* contains the same element. The middle High German prefix *en-* does not we conceive arise from the old High German *n'* for *ni*, nor do we think it is analogous to the formation of *ἐμοῦ*, *ἐμοί*, *ἐμέ*, from *μοῦ*, *μοί*, *μέ* (Grimm p. 711). It is we believe the fuller form of the negation (compare *ἀ-νά*), and is connected with the German *un-*, *ent-*, Latin *in-*. In our opinion, too, Grimm is wrong in deriving the Italian and French particles of relation *ne* and *en* from the Latin *inde* (III. p. 746); it is quite clear to us that they are the compound prepositions of locality = "in", used adverbially "in regard to this;" *-ne* is the apocope of a larger form *ene*, or *ine*, of which either the first or the second vowel is generally omitted, because one vowel is sufficient for the articulation, and, in the case of a liquid, it is a matter of indifference whether it precedes or follows the liquid. Grimm himself compares the old High German interrogative *innû*, *inû*, *ëno* with the Gothic *annu*, and sees nothing strange in the substitution of *i* in old High German for *a* in Gothic (III. p. 757). The vowel form of the simple negation is a suffix *-at*, *-a*, or *-t*, one or other of the two component letters being

occasionally omitted. This suffix is peculiar to the old Norse. It is probably, as Grimm supposes (p. 718), a corruption of *vâtt*, which is used to strengthen the negation, like the German *wicht*, and the fundamental negation is omitted, as the French negative is before *pas*, *point*, *rien*, in *pas un mot*, *point du tout*, *rien du tout*. The prohibitive negation is in Gothic *ni* as in *ni grêt!* (*μὴ κλαῖε*); old High German the same, as *ni churi!* (*noli*); in middle High German the prefix *en* as *en ruoche!* (*noli curare*); in Anglo-Saxon it is *ne*, frequently strengthened by a following *nâ* = *ně-â* (*never*), thus *ně vĕp þu nâ* "weep not." Grimm's general conclusion is as follows (p. 743); "On the whole, then, there are two sorts of negation. The one quite formal and abstract, which, though at first the soul of all negation, vanishes by degrees in its separate use, and only continues its influence in connexion with other particles. It is superseded by words, which properly contain the idea of *less*, *little*, *small*, either quite concretely, or perhaps in a more abstract sense. At first they are only united as companions to the negative particle, and coalesce into an equally abstract form, of which our new High German *nicht*, new Netherland *niet*, English *not* is the most striking example. Frequently, however, they dispense with the simple negative, and make a formal negation out of their diminutive-sense, as is especially shown in the Norse *icke*. This interlacing of the formal, and, as it were, material negation, explains to us two phenomena: on the one hand, the *repetition* of the negative-particle, and, on the other, its complete *dispensableness*. If our new High German *weder* (*neque*) = old High German *niwĕdar*, the middle High German *wan* (*nisi*) = *newan*, the Gothic *ibai* = *nibái*: in like manner we have seen that also *stoup* ('an atom'), *wint*, *tuivel* ('devil')¹, and the old Nordish *vætr* ('demon,' 'genius') serve as negatives without any preceding abstract negation. The formal negation is therefore unessential."

If now we compare this *ni*, *ně*, of the German dialects with the Greek negative prefix *νη-* and with the second part of *ἀ-νά*, we shall have no difficulty in recognizing their identity. We have before mentioned, that the middle High German prefix *en-* points to a fuller form corresponding to the whole of *ἀ-νά*. The form (*ně*) of the simple negative occurs in Latin in the combi-

1. Just as "Devil a bit," is used in vulgar English to signify "not at all."

nation *ne-quidem* with a word interposed, and also in the compounds *non*, *neque*, &c.

In the German dialects we have seen that the prohibitive does not differ from the simple negative: the same is the case in the Latin *né* except that the vowel is long. In Greek the prohibitive is $\mu\eta$, in Sanscrit *mā*, and in Persian *me*. The analogy of the German dialects might lead us, at first sight, to seek for some connexion between $\mu\eta$, and *né*, as Grimm has done (p. 745). But, when we consider that $\mu\alpha$ and $\nu\eta$ are used in direct opposition to one another in oaths, and compare $\mu\iota\nu$ and $\nu\iota\nu$, the distinction between which we have pointed out before, we are compelled to seek for some way of explaining the word $\mu\eta$ less obvious but less objectionable than that of a transformation of *n* into *m*.

In the ordinary use of $\mu\alpha$ and $\nu\eta$, the former refers to a negative oath, the latter to a positive one; moreover $\nu\alpha\iota$, which bears the same relation to $\nu\eta$ that $\delta\alpha\iota$ does to $\delta\eta$, is always used in a positive sense, like the Latin *nae*. The question $\tau\acute{\iota}\mu\eta\nu$; is generally used with a negative sense; $\eta\mu\eta\nu$, which is used as a form of swearing, is mostly found in a positive sense. With regard to $\mu\alpha$ we believe, with Passow, that it is, in itself, neither affirmative nor negative, but gains either the one sense or the other according as it has $\nu\alpha\iota$ or $\omicron\nu$ prefixed or understood. In our opinion $\mu\alpha$ contains the element of the first personal pronoun; it bears the same relation to $\mu\epsilon-\tau\alpha$ that $\kappa\alpha$ or $\kappa\epsilon\nu$ does to $\kappa\alpha-\tau\alpha$, and signifies "with" or "by", which is our preposition for expressing an oath: the leading idea is that of absolute nearness to the subject. If $\nu\alpha\iota$, $\nu\eta$, are, as we have no doubt they are, connected with the second syllable of $\acute{\alpha}-\nu\acute{\alpha}$, and the negative prefix $\nu\eta$, the idea conveyed by these particles must be quite the reverse, for the leading meaning of $\nu\iota\nu$, $-\nu\alpha$, $\nu\eta$ - is, as we have already shown, that of "distance", "separation". Grimm says (III. p. 767), "the seemingly negative form of the affirmative $\nu\alpha\iota$ (Lat. *nae*!) is worthy of notice; we might compare $\nu\alpha\iota$ and $\omicron\nu$ with the Gothic *né* and *jai*, except that the meaning is reversed. If we take the Hessian $\ddot{a} = n\ddot{a}$, in connexion with the Swabian *et* = *net*, and the identity between the negative and positive expression which occasionally presents itself, there results apparently a deep-founded identity between the negative and affirmative particle, which I purposely forbear to investigate farther." All *primâ facie* difficulty occasioned by

this fact vanishes when we recollect that the prefix *νη-* is used with an intensive or affirmative signification, and in general “yes” and “no” are only emphatic expletives, which may be expressed by the two most definite pronominal words *ma* and *na*, signifying separation and distance, as well as by any one of those simple words by which we affirm or deny in our common conversation. Our own “yes” is simply the second pronoun, denoting “here”, opposed to “no”, the strongest form of the third element, just as *γε* and *κα-τὰ* are used with an affirmative sense, in opposition to *ἀ-νὰ* and *ἀ-πό*.

It appears, then, probable that the supposed identity between *μη* and *ne* cannot be established. In order to explain *μη*, we must turn our attention to the other and more direct negative *οὐ*, and consider what are the leading and fundamental distinctions between the two particles.

There can be little doubt as to the derivation of *οὐ*, *οὐκ*. The only question that could be raised, is whether we ought to derive it at once from the Sanscrit *avak* (*deorsum*), considering that an apocope has taken place in the form *οὐ*, which is Pott's opinion (*Etym. Forsch.* II. p. 134 comp. I. 273, II. 64, 183); or rather with Bopp (*Vergl. Gramm.* p. 547, 8) connect it with the Indian-Zendic *ava*, Slavonic *ovo*, and take the final consonant as a mutilation of *-κι*, *-χι*, the Sanscrit *-chi*, *-cha*, Latin *-que*; so that *οὐ* is related to *οὐ-κ*, *οὐ-χι*, as *ne* is to *ne-c*, *ne-que*. We have no hesitation in adopting this latter opinion, which, we think, is confirmed by the appearance of the simple root *au* (*av*), with the signification of “removal”, “separation”, “contrast”, which gives rise to the negative, in the Greek *αὐ*, *αὐ-θι*, *αὐ-τις*, *αὐ-ερίω*, &c., and the Latin *au-tem*, *au-t*, *hau-t* (*haud*), *au-fugio*, &c. (see Bopp, *l. l.* p. 546). A question might arise, whether we are to consider *αὐ*, *ava*, as simply the element *va* a form of the first pronominal stem, with the semivowel transposed, or this same element appended to itself in a state of further mutilation. A comparison of *aufero*, with *abs-tuli*, *ab-latus*; and of *a-va* with *ἀ-πό*, also used in a negative sense; and the difficulty of explaining the second vowel otherwise, induce us to believe that *a-va-k*, *ο-ὐ-κ*, are the compound preposition *a-va* = *ἀ-πό*, with the element *ka* affixed, so that *a-va-k* is a strengthened form of *ἐ-κς* on the one hand, and of *va-his* on the other. The particle *οὐν* = *avam* is an additional confirmation of this etymology of *οὐ-κ*. Hartung

justly remarks (*Partikeln* II. 3) that the double form $\text{o}\hat{\upsilon}\nu$, $\hat{\omega}\nu$, leads us, according to the analogy of $\text{o}\hat{\upsilon}\varsigma$ — $\hat{\omega}\varsigma$ or *auris*, to a ground form $\text{a}\hat{\upsilon}\nu$, which is clearly an accusative. We find the element of this accusative in the pronoun $\text{a}\hat{\upsilon}\nu$ - $\tau\acute{o}\varsigma$. It is doubtful whether the Cretan and Laconian word $\text{a}\hat{\upsilon}\varsigma$, quoted by Hesychius, is a synonym of $\text{a}\hat{\upsilon}\tau\acute{o}\varsigma$ or of $\text{o}\hat{\upsilon}\varsigma$. He says, $\text{a}\hat{\upsilon}\varsigma$. $\text{a}\hat{\upsilon}\tau\acute{o}\varsigma$. $\text{Κρητὲς καὶ Λάκωνες}$. Now we might suppose with Soping that $\text{a}\hat{\upsilon}\tau\acute{o}\varsigma$ is the genitive of $\text{a}\hat{\upsilon}\varsigma$, as $\hat{\omega}\tau\acute{o}\varsigma$ is of $\text{o}\hat{\upsilon}\varsigma$. But in either case we have an analogy for the connexion of $\text{o}\hat{\upsilon}\nu$ with $\text{a}\hat{\upsilon}$, and the Zend neuter accusative *aom*. If this be true, $\text{o}\hat{\upsilon}\nu$ - κ expresses a total disjunction, separation, denial, like the Latin *h-aut* and *non*, and the Greek $\acute{\alpha}$ - $\nu\acute{\alpha}$, in which the fundamental meaning is the same—i. e. distance, removal. Accordingly, if $\mu\alpha$ and $\mu\eta$ are connected, $\text{o}\hat{\upsilon}\nu$ - κ must be put along-side of α - $\nu\alpha$, $\nu\eta$ -, and we must expect to find the same distinction between $\text{o}\hat{\upsilon}\nu$ - κ and $\mu\eta$ as we have already observed to exist between $\mu\alpha$ and $\nu\eta$.

All scholars, who have written on the distinction between $\text{o}\hat{\upsilon}\nu$ - κ and $\mu\eta$, have made it consist in this, that while the former denies absolutely, the latter denies relatively to some thought or opinion of the speaker. In other words, $\text{o}\hat{\upsilon}\nu$ - κ denies *objectively*, $\mu\eta$ *subjectively*. Now what could be better suited to express *subjectivity* than a word which contains, under a strong form, the simple element of the first personal pronoun? Such a word is $\mu\eta$, a stronger form of $\mu\alpha$; $\mu\alpha$ is opposed to $\nu\eta$ as nearness is to farness, and $\mu\eta$ to $\text{o}\hat{\upsilon}\nu$ - κ as subject is to object. This root appears with the same notion of subjectivity in the verb $\mu\acute{\alpha}\omega$, of which more hereafter.

We proceed to the interrogative particles. As we have distinguished negation into subjective and objective, so Grimm considers that questions are either subjective or objective (III. p. 751): “Intrinsically considered,” says he, “there are two sorts of questions, the one requires in the answer an expression of knowledge or opinion about something, without the necessity for any direct affirmation or negation; the other sort of question, on the contrary, desires the affirming or negating determination of the answerer. In the former case the question turns upon the thing asked about, in the latter on the will or knowledge of the person questioned. The former may be called the *objective*, the latter the *subjective* question. The following

are instances of the objective question: 'who is there?' 'whom lovest thou?' 'how did that come to pass?' 'when did you see him?' The following are subjective questions: 'is he there?' 'lovest thou me?' 'will you go with me?' 'is he alone?'

"This distinction according to the content of the questions is connected with the formal distinction which has been premised. Objective questions are generally expressed by the sound, subjective by a suffix.

"Inasmuch as the questioner does not know before-hand what answer will be given, all questions are naturally doubtful. The subjective question, however, is doubtful in a higher degree. The objective questioner desires information, and may receive it in an infinite variety of ways. The uncertainty of the subjective questioner is tied to one of two possible answers, yes or no. Accordingly, we may add an 'or not?' to every subjective question; in other words, it may be taken either positively or negatively. Instead of—'is he there?' 'lovest thou me?' it would, in many cases, be equivalent to say—'is he not there?' 'lovest thou not me?' (the expectation of the questioner being the cause of preferring one mode of expression to the other). From this follows generally and at once a sort of connexion between the subjective question and the negation, which the forms of the interrogative particles also confirm."

The objective question is asked by the interrogative pronoun, or some word derived from it. We have before shown that this pronoun in Greek is, in its shortest and oldest form, κ - ($\kappa\iota\varsigma$, $\kappa\omicron\varsigma$). The subjective question is expressed by interrogative particles, of which, according to Grimm (III. p. 760), there were three forms in the Indo-Germanic languages: (1) the Gothic suffix *-u*, which he considers as perhaps related to the Greek $\omicron\upsilon$; (2) the Gothic suffix *-nu*, old High German *-nû*, Sanscrit *-nu*, Latin *-ne*, Greek $\mu\eta$, old High German *-na*; (3) the Gothic *an-*, old High German *in-*, Latin *an*, Greek $\omicron\upsilon\nu$, which, he remarks, are all connected with the simple negation. To these may be added the important particle $\acute{\alpha}\rho\alpha$ or $\acute{\alpha}'\rho\alpha$, which asks the questions apparently in a negative as well as in a positive way: this also seems to have been the case with $\omicron\upsilon\kappa$ $\omicron\upsilon\nu$. It is highly important to know that all the roots mentioned by Grimm, and the $\acute{\alpha}\rho\alpha$ adduced by us, are used not merely as interrogative and negative, but also as inferential, particles.

We have pointed out before the co-ordination which subsists between *ἀ-νὰ* and *κα-τά*, in their various uses. We find them here again employed in expressing the former a subjective, the latter an objective question. Or rather the root which enters into *κα-τά*, and which is found more simply in *κα*, *κεν*, *κε*, is the same as that of the interrogative pronoun, which in some form or other is generally prefixed to objective questions: and both parts of the compound *ἀ-να*, as well as the whole word, are found as the interrogative particle in subjective questions in the Indo-Germanic languages. When *ἀ* occurs in this use in Greek, it is strengthened by the particle *ῥα* and becomes *ῥα*. In Latin we have *an* as a direct interrogative, and also *-ne* and *num*, the former being used as a suffix only.

Although there is no occasion to connect the Gothic *u* with *οὐ*, as Grimm has done, it is true enough that the Greeks used the objective negation in these subjective questions, sometimes in a doubled form, as *οὐκ οὐν*, sometimes alone, and frequently in conjunction with the subjective negation *μή*, as in *μῶν=μή-οὐν*, *μή οὐχ οὕτως ἔχῃ*, &c. This is easily explicable. We do not speak of the subjective negation in the same sense in which Grimm applies the epithet to questions which may be expressed negatively. The subjective *negation* refers to the opinion of the speaker, the subjective *question* to that of the person interrogated. But although these subjective questions always refer to some opinion, will, or knowledge of the person questioned, they may express in themselves, though faintly, an opinion on the part of the questioner. We find that in these cases the subjective negation, which refers to the speaker, is always prefixed.

When there is such a vacillation between the affirmative and negative modes of putting a subjective question, we need not wonder that there should be a similar ambiguity in the answer. Thus it is that *ναί*, *næ*, obviously connected with the negative root *-να*, *νη-*, are always used as affirmative answers, corresponding to the English "yes." The writer in the *Philological Museum* above referred to, explains the fact thus: He asks (p. 323) "may not this connexion between the positive answers and the negative root have arisen from the use of the negative, like our 'nay', *immo*, or *anxi* (*ante*), in Italian? which are negative, inasmuch as they object to the preceding phrase as not being strong enough, whilst they agree with its general meaning and

enhance its force? Certainly, in these cases, the negative and affirmative senses often approach very near to one another, as, for instance, in the following passage of Ben Jonson: 'A good man always profits by his endeavour, *yea*, when absent, *nay*, when dead, by his example and memory'." The opinion of Pott (*Etym. Forsch.* II. p. 65) is much the same: "*immo*", he says, "nicht bejaht sondern nur negirt, oder (steigernd) opponirt." There is, it must be confessed, much of truth in this explanation, but it is not sufficient. The proper view, we conceive, is to derive this sense of *vaí*, like the other significations of the same root, from the original idea of farness, distance, separation, conveyed by it, and in which the meaning assigned by Pott and the English critic are contained.

From the signification of farness or distance we also explain the use of words, containing the same root with the negatives, as inferential particles. We have the negative root *á* in *á-pa*, the second part of which is the particle *pa*, also used separately, which, as we have before remarked, denotes motion, and is found in comparatives; so that *á-pa* will signify distance, or progression to another step in the argument, which is the idea of an inference. We have the negative root *va-*, with a weaker inferential sense, in *vv*, *vûv*, Latin *nam*, and the direct negative *ov-κ*, as we have before observed, appears as an accusative in *ovv*. This last particle always refers to something that has gone before; it takes up what has been said, and continues it; so that the ground-meaning is still the same, namely, that of farness. The use of *vûv*, *nun-c* as particles of time is to be explained from the feeling that the present time is an advanced point in comparison with any preceding time that may be spoken of.

There are still other modifications of the idea of distance or progression, which we will now examine. Words with much the same signification appear in weaker or stronger forms in the Greek language. Thus we have both *éτι* and *είτα* (comp. *ávτι* and *ávτα*), *άταρ* and *αὐταρ*, *άρα* and *ἀρα*, *έν* and *είν*. The same is the case in Sanscrit. We find pronominal roots *ana* and *éna*, *ava* and *éva*, *ati* and *éta*, which have the same force, for they all alike signify distance. Bopp is unquestionably right in comparing *éτι* and *ati* (*Demonstrativstämme* p. 16), which are to be considered as by-forms of *είτα* and *éta*. A comparison of the Sanscrit and Greek enables us to explain the Greek and

Latin particles *ēn*, *ἤν*, *ἡνίδε*, which have occasioned much difficulty to scholars. That *ēn* and *ἤν* are identical can scarcely be doubted. The only question is, how to explain *ecce*, *ecquis* in Latin, and *ἡνίδε* in Greek. There is no instance, so far as we know, of a change of *n* into *c* in the former language, therefore *ecce*, which is a synonym for *en*, cannot be a compound of *en* and *ce*: the same remark applies to *ecquis*. We adopt, without hesitation, the suggestion thrown out by Pott (*Etym. Forsch.* II. p. 138), that the first part of *ecce*, *ecquis*, is a pronominal root analogous to the Sanscrit *éta*: comp. *iccirco* for *idcirco*, *accingo* for *adcingo*, &c.: in fact, *etquis* is often found in old MSS. The pronominal roots *éta*, *éna*, equally signify distance: they point to the *there* as removed beyond some other point. Now this is the ground meaning of *en* and *ecce*: they are particles which are used to attract the hearer's attention to an object distinct from him and the speaker, and for this purpose a word strongly marking distance would naturally be used, and to this the element of the second pronoun is appended in the case of *ec-ce*, in order to mark the approximation or importance of the distant object to the speaker or hearer. The particle *ἡνὶ* is related to *ἤν* as *ννὶ* is to *νν*, and *δαὶ* to *δῆ* (Pott l. c.). Hartung supposes (*Partikeln* I. p. 273 note) that *ἡνίδε* is merely this *ἡνὶ* with the suffix *δέ*. Although this is possible, a comparison of *ἤν ἰδοῦ*, which also occurs, of the French *voilà*, of the German *sieh da!* and of our "lo you there" (look there), inclines us to suppose that this word is nothing but a compound of *ἤν ἰδέ*, "see there." This shows us too that the real meaning of *ἤν* is that of *éna*; that in fact it is only a pronoun like the Gothic *þaruh*, "there", which is used by Ulphilas to translate *ἰδοῦ* (Grimm. III. p. 172.).

To the idea of distance or progression the copulative conjunctions are also due. The relation which subsists between these conjunctions and the demonstrative and relative pronouns in the Latin and Greek languages is obvious; *tum-tum*, are evidently demonstratives; *quum-quum*, *que*, *καὶ*, and the corrupted form *τε*, are as clearly connected with the relative or interrogative stems. The Latin *et*, *at* are to be compared with *ἐτι*, Sanscrit *ati*; *ἐτι*, *εἰτα*, are used in Greek very much in the same way as the copulative conjunctions. An attempt has been made by Herzog (in his edition of *Cæsar de bello civili*, p. 4, 5) to point

out accurately the distinction between the use and meaning of the Latin copulative conjunctions. According to him, *ac* is throughout a logical particle, which places two predicates or ideas on *the same* footing, so that one is equal to the other in the supposed relation; *et*, on the other hand, is a mere particle of addition: $1+1=2$: *atque* (which he wrongly supposes to be a combination of *ac* and *que*) connects two ideas, as cause and effect, antecedent and consequent, or conversely. That there is some truth in this appears from the obvious etymology of these Latin particles. *Ac*, however, is clearly a shortened form of *æque*, as *nec* is of *ne-que*; compare *æquus*=*ékas*. The long *a* is put here instead of the diphthong, and the change from the double sound *qv* to the single *c=k*, need astonish no one after what has been already said on the subject. There appears to have been a great vacillation in the use of *c* and *q* by the Latin copyists; thus in Cicero (*pro Muræna* II. [25]) eleven MSS. have *vero acædam*, four others *vere cuadam*, *vero cuadam*, *vero ac eadem*, or *vero* alone; and the Venice edition of 1484, has *vero ac edam*, though the true reading is *verba quædam*, as Niebuhr has shown (*Rheinisch. Mus.* for 1827, p. 228). The case of *cujus*, *cur*, *cum*, &c. will also be remembered. The first syllable of *atque* is to be compared like *et*, *at*, and the preposition *ad*, with the Greek ἔτι, Sanscrit *ati*.

In the first chapter of this second book we endeavoured to show that the elements of the demonstrative, indefinite, interrogative, and relative pronouns are the same, though, in Greek, the radical letter varies in an extraordinary manner, being either an aspirate or one of the three *tenues*. The aspirate, the labial and the guttural are, as we have seen, the legitimate offspring of the second pronominal element under the form *Fa*, but the dental is simply a degenerate and corrupted progeny of the sibilant. The form under which the interrogative ultimately appears in common Greek, is *τ-* (*τίς*), or, in Ionic, *κ* (*κῆ, κόθεν*, &c.). Instances of these two forms are the copulative conjunctions *τε, καί*. When we compare *ὅκ-κα* &c. with *ὅ-τε* &c., and *τέσσαρες, τε*, with the Sanscrit synonyms *chatur, cha*, and the Latin *quatuor, que*, and remember the connexion which subsists between *cha* and the interrogative stem *ka*, and between the first part of *cha-tur* and *é-ka*, English *each* (comp. *qua-tuor* and *æ-quus*), we shall find it difficult to deny the relationship of *τε* to *καί*. Hermann, with

a different view, has endeavoured to establish the identity of $\tau\acute{\epsilon}$, $\kappa\acute{\epsilon}\nu$ (which he derives from $\kappa\alpha\acute{\iota}$), and $\pi\omicron\upsilon$ ($\kappa\omicron\upsilon$) in the sense of “perhaps” (*de Particulâ ἄν. Opusc. IV. p. 4, 9 foll.*); their correspondence, in this respect, can only be explained by the fact which he has overlooked, that they are all forms of the indefinite pronoun, and are all used to convey that indefinite idea of locality to which their meaning of doubtfulness is due: ($\kappa\acute{\alpha}$) $\kappa\acute{\epsilon}$, $\kappa\acute{\epsilon}\nu$, bear the same relation to $\kappa\alpha\acute{\iota}$, that $\delta\acute{\epsilon}$, $\delta\acute{\epsilon}\nu$, do to $\delta\alpha\acute{\iota}$, which, like $\kappa\alpha\acute{\iota}$, is never used as an enclitic. In this consists the great distinction between $\tau\epsilon$ and $\kappa\alpha\acute{\iota}$; $\tau\epsilon$ is a mere indefinite, enclitic word, always placed after the word to which it refers, whereas $\kappa\alpha\acute{\iota}$ is generally placed before the words to which it belongs, and is used rather in a relative than in an indefinite sense. Though we constantly find $\tau\epsilon\text{-}\kappa\alpha\acute{\iota}$, we seldom have $\kappa\alpha\acute{\iota}\text{-}\tau\epsilon$: the former collocation answers pretty nearly to “some where”—“where”. The use of $\kappa\alpha\acute{\iota}$ $\tau\epsilon$ is of itself a proof of the relative power of $\kappa\alpha\acute{\iota}$, for $\tau\epsilon$ is continually found in immediate connexion with relative words, as $\acute{\omicron}\varsigma$ $\tau\epsilon$, $\acute{\omega}\varsigma$ $\tau\epsilon$, $\acute{\omicron}\iota\acute{\omicron}\varsigma$ $\tau\epsilon$, $\acute{\omicron}\sigma\omicron\varsigma$ $\tau\epsilon$, &c.

The investigation of the use of copulative conjunctions, or of the connexion of sentences, is a question of syntax, on which we must make a few remarks, though it may appear at first sight to be in some measure foreign to our leading objects. When we wish to speak of something that happened as subordinate to, or in connexion with, some other thing that we are speaking about, we may express this occasionally by a participle or infinitive mood; but in by far the majority of cases a greater degree of definiteness is required, and then we invariably call in the aid of some word of pronominal origin to connect the two statements together. These auxiliary words are relatives, whether they appear in the form of adjectives or of adverbs. The correlation of two sentences is effected either by placing the relative word in both clauses, as in the Latin *qua—qua*, Greek $\kappa\alpha\acute{\iota}\text{—}\kappa\alpha\acute{\iota}$; by placing an indefinite in both sentences, as *virique, fæminæ-que*, $\acute{\alpha}\nu\delta\rho\acute{\epsilon}\varsigma$ $\tau\epsilon$ $\theta\epsilon\omicron\iota$ $\tau\epsilon$; by placing the indefinite in the first clause and the relative in the second, as in $\text{—}\tau\epsilon\text{—}\kappa\alpha\acute{\iota}$; or, by an inversion common enough in Greek and Latin, putting the relative clause first, as in *quum—tum*; or, finally, by putting a demonstrative in each sentence, as *tum—tum*. The primary mode of balancing sentences appears to have been by placing the same particle in each clause in order that the simi-

larity of sound might help the ear. But, by the same process which led to the division of pronouns into definite and indefinite, a distinction was made between the forms as stronger and weaker; the latter preceded, and the office of uniting the two parts of the sentence devolved upon the former.

In its usage the Latin enclitic *-que* corresponds to the Greek *-τε*, though it bears more external resemblance to *καί*, or rather to the *κα* which appears in *ὅκ-κα* = *ὁ-τε*, *πό-κα* = *πό-τε*, *εἰ-κα* = *εἰ-τε*, Latin *si-qua*. We find this older and more genuine form of the Greek enclitic also in the adverbs *αὐτί-κα*, *πηνί-κα*, *ἡνί-κα*, *τηνί-κα*, &c. Bopp supposes that the termination of these words is *νίκα*, *αὐτίκα* being a contraction for *αὐτηνίκα*. The termination *νίκα* he compares with the Sanscrit *nish*, nom. *nik* "night," which is found in *anisham* "for ever" i. e. "without night" (*über den Einfluss*, &c. p. 10. *Vergleich. Gramm.* p. 614). This is quite inadmissible. Nor can we approve of Buttmann's supposition that the termination is *-ίκα*, the accusative of an obsolete *ἴζ*, analogous to the Latin *via*, *vices* (*Lexil.* II. p. 227). When we compare the *νῦν*, *νυνί*, *ἦν*, *ἡνί*, mentioned above, and remember that *δὲν* is a particle signifying time, and that *αὐτί*, *αὐτε*, *αὐθις*, &c. occur separately, we must conclude that the termination is *-κα*. When we recollect, too, that the Latin *done-c*, *doni-cum*, *deni-que*, *nam-que* (*nem-pe*), *quando-que*, and the Greek *ὁ-τε*, *πό-τε*, *τό-τε*, *εὖ-τε*, &c. are also particles expressing time, we are driven to the conclusion that the last syllable of *αὐτί-κα*, *πηνί-κα*, &c. is also the interrogative stem, used as an enclitic like the Latin *-que*. The same is to be said of the termination of *τετρά-κις*, &c. The compounds *ὅκως* (*ὁ-πως*) and *ὅφρα* must not be confused with one another: the former is a compound of the ordinary relative with the indefinite, the whole being expressed in the ablative case, while *ὅφρα* is the same relative with the suffix *πα-ρα*, the *π* being changed into *φ* either from the contact with *ρ* or by a transfer of the initial aspirate.

Although our analysis of the original forms of the pronominal roots has led us to consider *τε* as belonging to the interrogatives and ultimately to the relatives, we find that this enclitic is constantly used in combination with the stronger relative forms *ὅς*, *καί*, *πο-*, *κο-*, *οἷος*, &c., and with the demonstratives *το-*, *τοῖος*, &c. We need not wonder at this, for the stronger

form is often placed before the weaker in the languages with which we are concerned, especially when the weaker form has by mutilation or otherwise lost to any considerable extent its external resemblance to the stronger form with which it is connected. Thus in Latin we constantly have *æque ac*, though, as we have shown, *æque* and *ac* are but different forms of the same word. The addition of the indefinite to the relative occurs more frequently in the older than in the more recent Greek writers. The effect of it is to give greater definiteness to the relative sentence. We have before referred to the mode of expressing the correlation of two sentences by putting the same particle in each. In process of time different variations of this practice came in. One of the first would be to place the two correlative words together (for instance *καί-καί*, *qua-qua*), the natural consequence of which would be to shorten one of them, and then to leave it out altogether. The case of *æque ac* to which we have just alluded will afford a good instance of this. The sentence *is tibi notus est æque ac mihi* might be written *is notus est æque tibi*, *æque mihi*, or *is notus est tibi ac mihi*. Another step would be to put the indefinite or weaker form into the first sentence, and the relative or stronger form into the other. An instance of this is the common use of *τε* and *καί*. If, however, it was desired to give particular emphasis to the relative clause, the word which was found in the antecedent clause would be repeated in the relative clause, though the relative word alone was sufficient to express the general correlation. Thus *Iliad* XVI. 9. ἡὔτε κούρη νηπίνη ἥθ' ἅμα μητρὶ θεοῦσ' ἀνελέσθαι ἀνώγει εἰανοῦ ἀπτομένη καὶ τε ἐσσυμένην κατερύκει. Xenophon *Anab.* II. 1 § 22. καὶ ἡμῖν ταῦτ' ἄπερ καὶ βασιλεῖ. Lastly, just as the relative adjective is put alone in certain cases without a formal expression of the antecedent, the antecedent particle is omitted, but to give the full definiteness required by the relative sentence, not only the relative but the antecedent particle are retained in it. Of this usage of *καί* we have an infinity of examples even in the Attic writers; of the separate use of *τε* with the relative words the instances in the Attic writers are comparatively rare, with the exception of the combination *ἄ-τε*, *ὥς-τε*, *οἷός τε*, to which may be added the analogous compound *ὅς-τις*, which is to be explained by an application of the same principle. *Οἷός τ' εἶμι* always means,

in the Attic writers, "I am able." In the older writers οἷός τε signifies "precisely such" and chiefly appears in comparisons. Thus *Odyss.* XXI. 173, τοῖον—οἷόν τε ῥυτῆρα βιοῦ τ' ἔμεναι καὶ οἷστῶν. It is quite clear that, though the meaning is idiomatically restricted to the idea of ability in the Attic dialect, this notion of a comparison is the basis. In that dialect the omission of the antecedent clause is more common than in any of the other varieties of the Greek language. Such an omission has taken place here, and οἷός τ' εἶμι is equivalent to τοῖος εἶμι, οἷός τε ποιεῖν ταῦτα, "I am the *particular kind* of person to do these things," i.e. "I am calculated for the performance of such and such things." In the same way οἷος καὶ is also used. We have striking instances of the definiteness thus communicated to the relative clause by the addition of τε in ὅσον-τε used in definitions of numbers: e.g. *Herod.* III. 5. ἐὼν τοῦτο οὐκ ὀλίγον χωρίον, ἀλλ' ὅσον τε ἐπὶ τρεῖς ἡμέρας ὁδόν. And by ἐφ' ᾧ τε in fixing the terms of a condition. *Herod.* I. 22. ἡ διαλλαγή σφι ἐγένετο, ἐπ' ᾧ τε ξείνους ἀλλήλοισι εἶναι καὶ ζυμμάχους. Like ὥστε we find ἐφ' ᾧ τε with the indicative as well as with the infinitive: comp. *Thucyd.* I. 103. 113. where we have the future indic. We also find ἐπὶ τοῖσδε, ὥστε (*Thucyd.* III. 114).

The enclitic τε appears to be used for the relative in ἔς τε, &c.; the same is the case in Latin, compare *us-que* with ἕως οὔ, μέχρι οὔ, &c. Τοι has no connexion with τε; it is simply a case of the third person pronoun. Its perfect identity with the demonstrative appears from the fact that καί τοι and καὶ ταῦτα are synonyms. English scholars generally translate the latter "and this too," a translation which applies to very few of the passages in which this combination occurs. It is of course the proper rendering in those cases where the pronoun is regularly declined as an adjective, as, for instance, in *Aristoph. Plutus* 545. πιθάκνης πλευράν, ἐρρωγυῖαν καὶ ταύτην (where see Dobree's note). In general, however, it corresponds exactly to καί τοι and means "although" "and yet." For instance, in *Æschylus (Eumen.* 113) it is used as a particle with a finite verb: καὶ ταῦτα κούφως ἐκ μέσων ἀρκυσμάτων ὥρουσεν. When it comes after other words τοι is written as an enclitic. We do not believe that it ever approached to the indefinite meaning which is proper to enclitics, and its appearance at the beginning of a sentence in the combinations τοίγαρ, τοιγάρτοι,

and even the use of *τοίνυν* is a proof that ought not to be considered as one at all. It is merely a demonstrative.

The ordinary disjunctive in the Greek language is the simple vowel *ῆ*. Pott justly remarks (*Etym. Forsch.* II. p. 321) that the number of words of different origin which this same vowel is used to represent is a striking proof of the corruptions which have crept into the Greek language. He enumerates the following: *ῆ* = *ait*, Sanscrit *âha*; *ῆ* = *ῆα* (*eram*), Sanscrit *âsa*; from the same root *ῆ* = *siet*, *sit*; *ῆ* interjection; *ῆ* = Sanscrit *sâ*; but *ῆ* (*quæ*) = Sanscrit *yâ*; and *ῆ* or *ἐῆ* = *quæ*, which is quite different from *ῆ* = *cui* feminine. This is sufficient, he adds, to show that the Greek Etymologer cannot expect much success if he pays no attention to the cognate languages. According to the principle which we have often referred to, we are justified in comparing *ῆ* and *ῆῦ* (in *ῆῦτε*) with the Sanscrit disjunctive *vã* or *vâ*. With regard to the substitution of *ῆ* in Greek for *va* in Sanscrit, Hartung (I. p. 217) properly compares *svâdu* (*suavis*), *ῆδύς*; *vâch* (*vox*), *ῆχή*. The following instances belong to what we have called the change of place of the digamma: *vâmi*, *ἄFημι*, *αῦρα*, *ἄFήρ* or *ῆήρ*, *ῆέρ*, *ἄFώς*, *ῆώς*: *vânkh*, *εὔχομαι*, to which we may add *ῆῦς*, *ἐῦς*, *ῆῦ*, *ἐῦ*, compared with the Sanscrit synonym *vasu* (see Benary, *Berlin. Jahrb.* Aug. 1834, p. 230). The Sanscrit *vâ* also signifies “like”, “as”, and in this it coincides with the Greek *φή*, or *φῆ* = *ώς*, which bears the same relation to *ῆ* that *φήμι* does to *ῆμι*. Buttmann supposes that *φή* is connected with *πῆ*, as *φανός* with *πανός*, *φάρσος* with *pars*, *φαινόλης* with *pænula*, *flagrum* with *πληγῆ* (*Lexil.* I. p. 241). The same seems to be the opinion of Müller (Grimm, *Deutsche Grammatik*, III. p. 770). This leads us to the second pronominal stem *Fa*, or, as it is more generally written in Greek, *σφέ*. The frequent omission of an initial *σ* in Greek need hardly be mentioned: the following are a few instances out of many: *σ-μικρός*, *μικ-ρός*; *snow*, *νιφάς*; *smile*, *μειδιάω*; Sanscrit *snâ*, *νίζω*; Sanscrit *snuçâ*, German *schnur*, *ννός* (Lat. *nurus*), &c. The shorter Sanscrit form *vã* corresponds with the Latin *-vẽ*. It is not probable that *vẽ* contains the root of *velle*, as Hartung (II. p. 63) and Pott (II. p. 317) suggest, although it might appear so from the frequent use of parts of this word in connexion with relative words, as in *quam-vis*, *qui-vis*. If we compare this last word with *quis-quam*, which it so nearly resembles in meaning,

and remember that *quam* is used like η to connect the two members of a comparison, we shall have little difficulty in perceiving that *ve-l* contains the element *va*, which we have identified with η . The termination is the intensive element $l\check{a} = r\check{a}$, which is appended to give a further direction to *va*. The difference between *qui-vis* and *quis-quam* is simply this; the former means "any one selected from any given number", "any one *you please*"; *quis-quam*, "any one of a given number", the selection not being supposed: thus Seneca *de Tranquill.* 11, *cuivis potest accidere, quod cuiquam potest*. That *-pam* is identical with *quam* in signification, as it is in origin, is clear: see e. g. Cicero (*in Verrem Actio*, II. Lib. I. c. 10), *nego esse quicquam a testibus dictum, quod aut vestrum cuipiam esset obscurum, aut cujusquam oratoris eloquentiam quæreret*.

There can be no doubt that the disjunctive η is the same word as the η used in comparisons. That a comparison presumes a disjunction, or difference, appears from the use of the genitive in Greek and Italian, and the ablative in Latin and Sanscrit, after comparatives. The same disjunctive force of the comparison is shown also by the following phenomena, some of which have been brought forward by Hartung (II. p. 68). In the proper correlation of sentences, the same word is placed in both the clauses: thus we have η — η , *aut*—*aut*, *alius*—*alius*, in disjunctions; now *aliud loquitur aliud sentit* is equivalent to *aliud loquitur quam sentit*, and *als* in German is a substitute for *quam*. From this it might be inferred that there is some connexion between the disjunctive or comparative η and the disjunctive or negative $\alpha\check{v}$, *aut*, *οὐκ*, *a-va*, into which an element, apparently the same, enters. We have before mentioned that there are two stems, both written *va*, one of which is an approximate vocalization of the first pronominal element, the other a mutilation of the strongest form of the second. There is every reason to believe that the disjunctive and comparative $\eta = va$ is simply this second or relative pronoun. In Latin the clause compared is connected with the clause on which it depends by a case of the relative, and the Sanscrit *vā*, when it means "in which manner", is clearly relative. Besides, if there were any really negative or disjunctive force in this $\eta = va$, the Greeks would not have added the strong negative *οὐ* to the disjunctive η when they wished to express that the second proposition in a comparison was not or ought not to be

entertained. This construction is very common after the comparative *μᾶλλον*, after which we find *οὐ* as well as *ἢ* whenever it is intended to express that the second alternative is very much to be preferred to the first, in which case, naturally enough, a negative, interrogative, or some word expressing extreme disapprobation, is invariably found in the first clause. Thus Thucyd. III. 36, *ὡμὸν τὸ βούλευμα καὶ μέγα ἐγνώσθαι πόλιν ὅλην διαφθεῖραι μᾶλλον ἢ οὐ τοὺς αἰτίους*, which, as Hermann rightly observes (*ad Sophocli. Aj.* 1260), is equivalent to *οὐ τοὺς αἰτίους ἀλλὰ μᾶλλον τὴν πόλιν ὅλην*, for, as we have said above, the word of the second clause in correlated sentences is only a substitute for the word in the former clause, which is here *μᾶλλον*—*μᾶλλον ὅλ. πόλ., οὐ μᾶλλον τ. αἰτ.* Other instances are Thucyd. II. 62; Herod. IV. 118, V. 94, VII. 16; Demosth. p. 1198, l. 14, p. 1200, l. 12, p. 1226, l. 23; Aristot. *Eth.* IV. 1; where *μᾶλλον ἢ οὐ* seems to have coalesced into one word.

The genitive case, which expresses removal, is, as is well known, also used in the second term of the comparison; the prepositions *π-λή-ν*, *παρά*, which express the idea of removal from the subject, are also contained in the comparative termination *-τε-ρος*. The particle *quam*, used to connect comparisons in Latin, is, like *κεν*, the locative of the elementary interrogative. In this particle comparison only, not difference, is implied: *non mehercule quidquam libentius facio, quam ad te scribo*, is perfectly equivalent to “*where or when* there is an opportunity of writing to you, I would not exchange that for any employment”. In the same way *wan*, also connected with the relative, is used in middle New German (Grimm, III. p. 183, 283). Our *than*, only another way of spelling *then*, is more nearly connected with the demonstrative, and expresses, like the Greek comparative termination, that in the given relation that which is mentioned in the second clause comes after that which is mentioned in the first: “Peter is greater *than* John”, i. e. “Peter is greater, *then* (comes) John”. Although relative words are not directly used to connect the terms of a comparison in Greek, we see traces of the feeling which led to their use in other languages in such phrases as *μείζων ἢ κατ’ ἀνθρώπον*, *θᾶσσον ἢ ὥς*—, *κακίων ἢ ὥς τε*—, where the difference is expressed as well as the likeness, just as the genitive, which expresses resemblance or comparison,

as well as separation and disjunction, is used after ἦ: Soph. *Antig.* 1281, τί δ' ἐστὶν αὖ κακίον ἢ κακῶν ἔτι.

*H is found in immediate conjunction with μέν, δέ, δή. Ἡ μέν—ἡ δέ are not disjunctives, but copulatives, signifying “both—and”; ἦ in this combination is, therefore, to be compared with the use of the Sanscrit *vā* for “as”;—“as in the first place—so in the second place.” Of μέν—δέ it is unnecessary to add much to what has been already said. They are generally and properly correlatives, though sometimes πλὴν, “farther”, ἄλλο, “another”, are substituted for δέ, to which their meaning is very much akin. As a general rule, ἀλλά is opposed not to μέν, but to οὐ, just as *sondern* in German expresses the opposition to a negative, and we often find a sentence in which οὐ, ἀλλά are opposed, including two others which contain an opposition of μέν, δέ. Thus Eurip. *Med.* 555.

οὐχ, ἦ σὺ κνίσεις—σὸν μέν ἐχθαίρων λέχος
καινῆς δὲ νύμφης ἡμέρῳ πεπληγμένος—
ἀλλ' ὥς κ. τ. λ.

*Hδη is almost always used as an expression of time. To explain the word properly, we must enter at some length upon an investigation into the formation and meaning of its second syllable δῆ, a particle of great importance. Hartung's account of δῆ (*Partikeln* I. p. 222-322) is about the worst specimen of etymological analysis we ever met with. He considers ἡδη as prior to δῆ (p. 275), refers all the meanings to a temporal one, and derives the second syllable from the Sanscrit root signifying “day” (p. 223 foll.). This is as objectionable as Bopp's derivation of the ending -νι-κα from *nisham*, *nox*. We have before shown that the idea of intervals or positions belongs to the primary thought-form of space, and that the words by which this idea is conveyed are pronouns, that is, words indicating position. Such a pronominal word is δέ, which, we have seen, indicates relative nearness, and therefore enters into the second personal pronoun, the second numeral, and a number of other pronominal words conveying the same idea. That such a pronominal word should be used to express “what is near to the *now*” as well as “what is near to the *here*,” is only what we should expect, and this is the full extent to which the idea of time enters into δῆ, and ἡδη. We have before pointed to the connexion between this

root and the preposition *διά*. The idea of duration is derived from that of division or passing through, and thus it is that *diu* signifies both length of time generally, and also the particular length of a day (*inter-diu*, compare *inter-dum*, where the root retains its more general meaning); it is, therefore, more than probable that the Latin *dies*, the Sanscrit *diva*, *dyu*, &c., are connected with this pronominal root, just as we have already seen other words of the same kind manifestly of pronominal origin; but to say conversely that a word like *δή*, which enters into such a vast number of combinations, which very often has not the slightest reference to time, and which is so obviously connected with an extensive class of pronominal roots, is derived from such a secondary idea as that of "day", is opposed to all the principles of a systematic analysis of language. Hartung supposes (I. p. 230) that *jam* is connected with *dies*, Sanscrit *dyas*, on the analogy of *Jovis* for *Djovis*, &c.; it is clear, on the contrary, that *jam* is merely the locative of the stem *Fa*, and bears the same relation to *piam* that *ιάλλω* does to *φιάλλω*: it appears also as the disyllable *ïam*.

In the temporal sense this root appears also under the form *δήν*, which generally signifies "long". This same word appears in Latin, under the lengthened form *deni*, which bears the same relation to *δήν* that *ήνι*, *νυνι* do to *ήν*, *νύν*. The word *denique* might be written *δηνίκα*, in conformity with *αὐτίκα*, *ήνίκα*, *πηνίκα*, and *όπηνίκα*, though it appears from a comparison of the synonyms *τῆμος*, *demus* (*demum*) that *τηνίκα* is the Greek form of *denique*, by a corruption similar to, but not so great as, that by which the enclitic *τε* has been formed from the regular stem of the second element. There is, in fact, no reason why *da* should not be a regular variety of the third element, but the caprices of custom having changed the *t* of the third element into *d* when the first element was added to it to form the second numeral, and the laws of Hellenism having subsequently expelled the labial, *δ*- has become the consistent representative of the second numeral in all those cases where it has superseded the second pronoun. *Δέ*, *δέν*, *δή*, *δήν*, are related just as *μέ*, *μέν*, *μή*, *μήν*, and it is singular enough that the last word of each set has the most direct reference to time, and the third of each are particularly opposed in expressing *μή* a doubt, and *δή*, confirmation. The opposition of *μέν*, *μέ*, *δέν*, *δέ*,

has been interfered with by causes to which we have before directly referred.

The first part of the compound ἥδη is the same as that of ἡμέν, ἡδέ; also, we believe, as that of ἡμος, which has no connexion with ἡμαρ, ἡμέρα. In the other compounds δὴ stands first. Of δῆτις, and its connexion in meaning with δείς, we have already spoken: δῆτα is of perfectly analogous formation: we may compare εἴτε, εἶτα; ἔπειτε, ἔπειτα; ἔνεκα, ἔνεκε, which fully explain the termination τα. The termination of δῆθεν is not so easily accounted for: δῆθεν is generally used in a sort of ironical signification (προσποίησιν ἀληθείας ἔχει, δύναμιν δὲ ψεύδους, *Suidas*); this signification is also generally borne by θήν, which is obviously connected with θέν as μέν with μήν, and δέν with δήν. That this termination is essentially the same with that sign of the genitive case, which we have before explained, is self-evident, in spite of Hartung's arbitrary assertion that they are totally distinct (I. 317): the old grammarians understood this when they translated δῆθεν and δῆπουθεν by ἐντεῦθεν and ἔκ τινος τόπου. If we compare ἔνθα, ἐνταῦθα, εἴθε, δῆθα, with the words before us, we must be convinced that these terminations differ from the second syllable of δῆθεν only in the absence of the locative ending ν. If now we recur to what we said before of the genitive ending θεν, and of the omission of the aspiration in that case, we must admit that these terminations are only softened forms of the second pronoun in the ultimate form of the compound *ta-va*, *d-va*, *dya*. That there is some sympathy between θ and γ appears from χθες compared with *hyas*, and that θα is in fact a representative of the second personal pronoun is clear from the forms οἷσ-θα, κλῦ-θι, &c. The ironical use may be easily explained by the sense "only," which is nothing but a mark of position, and which seems to pervade the Greek as well as the Latin words into which this root enters: εἴ θε, "I wish that" = "if only!" = "if in this particular." Compare the similar use of πῶς ἄν. The termination of μέταζε is the same as θε, θα: comp. Ζεύς, with θεός. We shall see by and by that this same root with the sense of position enters into the large class of words to which θεός belongs. We may compare δῆντε, δεῦτε, with ἦντε, εὔτε, and τρώυμα, τραῦμα. There is no need to suppose with Apollonius and Hartung that the first is a contraction of δὴ and αὐτε, although such com-

pounds were common enough; take, for instance, *τηνικαῦτα* from *τηνίκα*.

The Latin set of words into which this root enters very often have *o* or *u* instead of the Greek *ε*, *η*. They use *donec* by the side of *denique*, *dum* with *δήν* (*dum-taxat* involves a verb), and *-do* as a termination in *quan-do*, which may be compared with *tadâ*, "then", *yadâ*, "when", *kadâ*, "when", in Sanscrit. The coincidence in meaning between the Greek and Latin appearances of this root is very striking: it is to be remarked, however, that in Latin it is very often placed after the word to which it immediately refers, while in the same case it precedes in Greek: thus *δήτις* answers exactly in meaning to *qui-dam*. In *tan-dem*, and *deni-que*, we see that this root may be placed before, as well as after, the syllable to which it refers, and that too in synonyms. Another word of the same signification is *demum*, which, according to Festus, was also written *demus* (comp. *rursum*, *rursus*), and corresponds exactly to the Greek *τῆμος* opposed to *ἥμος*. The use of *i-dem*, *tanti-dem*, *toti-dem*, is just the same as that of *αὐτὸς δή*, *ὅσον δή*, *οἷον δή*, &c. in Greek. All the meanings of *δή*, *dem*, &c. may be deduced from the naturally intensive use of a word marking location with emphasis.

A great many of the uses of *δή* correspond with those of *περ*, which we have explained before as a word signifying "thoroughly," "entirely," and thus it is that *καί περ* corresponds so exactly with *ἐμ πας* (*ἐν πᾶσι*). The *m*, *ν*, or *νι*, which is found in words from this root is the mark of the locative case. The form *-dē* which is found as a termination in Latin (*in-de*, *quam-de*) corresponds with *-θα* in *ἐνθα*, &c. and is another proof of the connexion of that termination with the root of the second personal pronoun.

If we compare *γε*, *γα*, with *κε*, *κα*, we must feel disposed to seek for some connexion between these forms; we shall now endeavour to establish by proofs our assertion, that such a connexion does in fact subsist. The Latin *quī-dem*, which corresponds to *γε* or rather to *γε δή* in almost every respect, and which is obviously a compound of the relative stem *qu* (*ῑ*) and the *de*-stem which we have just discussed, proves that there is some affinity between the meanings of these concessive particles and that of the relative, which indeed might be shown directly, for *εἰ κε* or *siqua* are as nearly as possible

equivalent to $\epsilon\dot{\iota}$ $\gamma\epsilon$ or *si quidem*. In fact, we believe that in Attic Greek, $\gamma\epsilon$, which was much more frequently used by the more modern than by the more ancient writers, actually stands as the successor and substitute of $\kappa\epsilon$, which never appears in that dialect. In other languages of the Indo-Germanic family, the words which correspond to $\gamma\epsilon$ are manifestly connected with the relative and demonstrative stems. Thus, in German we have *ja* as a synonym of $\gamma\epsilon$ in its common sense of "yes" by the side of *jener*, a synonym of $\kappa\epsilon\dot{\iota}\nu\omicron\varsigma$, the connexion of which with $\kappa\epsilon$ has been before pointed out. We do not concur with Hartung in recognizing the identity of $\acute{\alpha}\gamma\alpha\nu$ and the Sanscrit *saha* (I. p. 228); the first syllable of the Greek word is not the collective but the intensive $\acute{\alpha}$. The second syllable, in the Sanscrit word, is a pronominal root intimately connected with the relative, and is the same which appears in the first personal pronoun *a-ha-m*, which we have before explained: so that *a-ha-m*, $\acute{\epsilon}\text{-}\gamma\omega\text{-}\nu$, and $\acute{\alpha}\text{-}\gamma\alpha\text{-}\nu$ are only different forms of the same word. It is remarkable that in Sanscrit there is a particle *hī* which corresponds very nearly in its use to $\gamma\epsilon$. That this is only another form of *hā* cannot be doubted, and thus we have an additional proof of the connexion of the relative with $\gamma\epsilon$. We shall have further remarks to make on this particle *hī* when we come to the verbal-endings. Hartung's supposition (I. p. 352) that $\zeta\alpha\text{-}$ is a by-form of $\acute{\alpha}\gamma\alpha\nu$ and an older form of $\gamma\epsilon$, (p. 357) is not to be entertained; for we think we have shown pretty clearly that $\zeta\alpha\text{-}$ is only another form of $\delta\acute{\iota}\acute{\alpha}$. The Anglo-Saxon *gēa*, our "yea", is, like the German *ja*, another form of $\gamma\epsilon$, and indeed a tolerably near approximation to it.

That the common inferential particle $\gamma\acute{\alpha}\rho$ involves the same root as $\gamma\acute{\epsilon}$, $\gamma\acute{\alpha}$, is sufficiently obvious, and scholars have generally endeavoured to explain it as a compound of $\gamma\epsilon$ and $\acute{\alpha}\rho\alpha$ just as $\gamma\omicron\upsilon\nu$ is made up of $\gamma\epsilon$ and $\omicron\upsilon\nu$. A little consideration will shew the erroneousness of this supposition. We have before pointed out the meaning of the pronominal stem $\acute{\alpha}$, signifying distance, removal, &c., and its use as a negative; also we have said generally that the termination $\text{-}\rho\alpha$ indicates motion, and is consequently joined to the third pronominal root $\tau\alpha\text{-}$, to denote "beyond": in which sense it is used as a comparative ending. As an ending with this sense we find not only $\tau\epsilon\text{-}\rho\omicron\varsigma$, but also the simple $\text{-}\rho\omicron\varsigma$, not only $\acute{\alpha}\rho\alpha$, but also the simple $\rho\acute{\alpha}$.

Thus, we have *πα-ρά*, and *tva-ra* instead of *tara* in the fourth numeral. Similarly, in the older English writers, we have *where* as well as *whether*: e. g. "but where I be as true begot or no" (*King John*, Act I. Sc. 1). With our modern *where*, signifying merely the relation of place, we may contrast the Sanscrit *ku-tra*, and the Latin *trans*, in which the stronger comparative ending is used without any immediate reference to the comparative degree. As a general rule we have the shorter form in *re*, *er* as the sign of the comparative in the Teutonic languages, so that *ra* may fairly be considered as a comparative suffix. For this reason also, words like *λυπ-ρός*, *μακ-ρός*, which have a comparative meaning, throw off the termination when they assume the comparative ending *-ίων*. Thus too we have *ᾶ-ρα* as well as *ᾶ-τε-ρ*. It is the merest trifling to say that *ῥα* is a contraction of *ᾶρα*; it is found in the oldest authors by itself, and has every right to be considered as ancient as the compound into which it enters. The words, in which it is found as a stem in the different Indo-Germanic languages, show at once that its meaning must be that which we have assigned to it. In Greek it is found in *ῥέω*, *ῥάδιος*, *ῥέπω*, &c., in Latin in *rapio*, *rapidus*, prefix *re-*, &c., in the old Norse *ras*, Anglo-Saxon *raes*, Swedish *rasa*, German *rasch*, *rauschen*. The difference in meaning between *ᾶρα* and *ῥα*, appears to us to be merely this, that in the former the notion of farness is combined with that of motion, in much the same way, though more emphatically, than in the comparative ending *-τερος*, while in *ῥα* the idea of motion, proceeding, &c. remains alone. It is for this reason that *ῥα* is never used to express a direct inference, i. e. a going farther in reference to, and in consequence of what has gone before, which is the common use of *ᾶρα*. We have before mentioned the intimate relationship of the negative and inferential particles. It arises, as before stated, from the idea of farness implied in the former. To express the negative, both negative roots are frequently combined into one, as in the case of *ἀ-νά*. Another form of *ἀνά*, namely *ἄνευ* (Æolic *ἄνις*) is used as a synonym of *ᾶ-τε-ρ*, which as we have just remarked, is only a stronger form of *ᾶ-ρα*. In a similar manner, a slight modification of the second syllable of *ἄνευ*, namely *νύ*, *νύν*, is used as a synonym of *ᾶρα*, i. e. in an inferential sense, just as *nam*, *nempe* = *namque*, are used in Latin. The

use of the second syllable of *ἀ-ρά*, under the lengthened form of *νή*, *ναί*, as a strong affirmative particle, corresponds to the similar use of *δή*, *δαί*, just as the strong form of *νύ*, *νύν*, i. e. *νύν*, corresponds with *δή*, when that particle is used to mark a point of time.

The hypothetical particle *εἰ* is intimately connected in meaning with the interrogative, and therefore with the inferential and negative particles. The pronominal origin of this word we have before pointed out. The meaning "in this that" = "if" = "in which" would at once lead us to imagine a connexion between the relative and demonstrative and the "if". The use of clearly demonstrative or relative words in the Indo-Germanic languages, as hypothetical particles, is an additional proof that *εἰ* must be a case of the pronoun *ἵ*. The only difficulty is occasioned by the appearance of the form *αἰ*, as an equally old particle with *εἰ*. We might be inclined to suppose from a comparison of the Æolic forms *κταίνω*, *φθαίρω*, with the common forms *κτείνω*, *φθείρω*, that the difference is merely a dialectical one: but the forms *κταίνω*, &c., seem to have arisen from an insufficient perception for the finer shades of vocalization, which requires that in heavy forms like these the lightest vowel should be employed, whereas *αἰ* seems to be a really stronger and less degenerated form than *εἰ*.

That there is some difference between *εἰ* and *αἰ*, farther appears from the fact, that Homer uses both forms, and with a slight but decided difference of meaning, *αἰ* being used principally in connexion with *γάρ*, *κέ*, and *θε*, and not by itself as a mere ordinary hypothetical particle. In the Boeotian dialect, we find, singularly enough, that not only is *η* occasionally written *ει*, as in *ὀνέθεικε* for *ἀνέθηκε*, *μεῖ* for *μή*, *ἐπιδεῖ* for *ἐπειδή*, &c. (Böckh *Corpus Inscript.* I. p. 720), but also conversely, *εἰ* is written *η* as in *ἡ δέ κά τις (πράτ)τη τὸ ἐννόμιον Εὐβωλον* (Böckh *Corp. Inscript.* I. p. 741, No. 1569, l. 48), moreover *η* is also a representative of *αι* (Böckh *Corp. Inscript.* I. p. 722), so that no argument for the difference can be derived from this dialect. If however we may read *βαίκα*, *εἰάν*, *Κρήτες*, for the gloss *βαῖκαν*, *Κρήτες*, in Hesychius (see Kön *ad Greg. Cor.* p. 114), and compare the old Latin form *suæ*, = *σFαι* (*suæ pis* = *siquis*; Müller *Etrusker*, Vol. I. p. 31, Note 62) with the other Latin forms *si*, *se*, *sei*, we may per-

haps be disposed to conclude that the form *ai* is derived more from the stronger form of the second element *Fa*, *ei* from the mutilated form *i*, which, however, is ultimately traceable to the same origin. This will account for the more common union of *ai* with relative particles in Homer, though as we have seen even the weaker form *ei* occasionally exerts an attractive influence on *κέν*, and even on *άν*. The conditional particle in most of the Indo-Germanic languages appears to have a connexion with the relatives. Compare in Sanscrit *ya-di* "if", *ya-di-vâ* "or" (*si-ve*) with *yat* = *quod*, *ya-tas* = *ὅθεν*, *ya-dâ* = *ὅτε*: also Gothic *ja-bai*, Frisic *jef*, Anglo-Saxon *gif*, Old German *i-bu*, *ubi*, Lettish *ja*, Finnish *yos*, all signifying "if" = "in which or in that case or supposition". The termination *bai*, appears to be the same as the Latin *bi*, Greek *-φι*, both locative endings (*Quarterly Review*, Vol. LVII. p. 105).

NEW GRAMMAR

BOOK III.

BOOK III.

THE NOUN.

THE CRATYLS

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THE NOUK

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NEW CRATYLUS.

BOOK III.

CHAPTER I.

THE ROOTS OF NOUNS AND VERBS.

IN a language, which, like the Greek, admits of inflexion and composition without limit, we find in every word that expresses a conception, whether it be a noun or a verb, some prefix, suffix, or both, which is common to it, and a great number of other words, from which it essentially differs in meaning, and, when stript of these adjuncts, there generally remains, if the word be not a compound, some single syllable which constitutes its meaning, and which again, with occasional slight modifications, runs through another set of words, differing from the one in question in prefix, suffix, or both, but agreeing with it in the fundamental signification. This ultimate element we call the *root*, or, if we may be permitted to borrow the terminology of mathematical analysis, and apply it to philology, we may say that every word is a *function*, the root being the *independent variable*, and the prefixes and suffixes the *constants*.

When we talk of the roots of words, we do not mean to say that words are derived from them, or that they ever existed separately. If we did, we must fall into the absurdity of deriving all languages from a few primitive syllables, an absurdity for which Murray has been so justly derided. Like the common parts in things generically the same, they are created by our powers of abstraction and generalization, they have only a sub-

jective existence, and to speak otherwise of them, would be the excess of realism. Every thing is conceived as existing or happening in space or time, and therefore, as has been shown, the element indicating the conception must always have, subjoined to it, some element indicating position, that is, at least one pronominal stem, before it can be considered as a word. That any hypothesis of the separate and primary existence of roots must lead to the merest trifling, is clear from the absurdities into which Lennep and Scheide have fallen, in their attempt to carry out Hemsterhuis' principle, that the primitive verbs consisted of two or three letters, from which the complete words, as we have them, were formed. It is, of course, of the utmost importance that we should analyze and compare words, so as to arrive at their primary elements, just as it is necessary for the philosopher to seek for the real definition; but there is no more truth in saying that the bare roots which form the materials of inflected language, ever existed separately, than there would be in asserting that the world was once peopled with *αὐτοέκαστα*, whose fossile remains, forsooth, the geologists have as yet failed to discover.

When we thus deny the separate existence of roots, it may be objected to us, that some languages, the Chinese for instance, are entirely made up of naked roots. But then it must be recollected, that all these roots are words which have in all probability lost their original inflexions, and that we are not speaking of idioms in which there is no such thing as flexion or etymology, but of the Indo-Germanic languages, which are based upon monosyllabic roots, adapted for composition, and only appearing in connexion with at least some pronominal element.

Many syllables terminating with a consonant are called roots of Indo-Germanic words. It must be recollected, however, that no consonant can be pronounced without a vowel, and that every such final consonant of a root was originally a distinct syllable, so that all roots terminating in consonants must be considered as disyllabic, and, therefore, as compound roots. In such compounds not only is the second vowel suppressed, but also, in some cases, the first, and thus too there are apparently monosyllabic roots ending in a vowel, which are nevertheless disyllabic (see Lepsius *Paläographie*, p. 65). An instance to

the point may be found in the root $\gamma\epsilon\nu$, which sometimes appears as $\gamma\upsilon\epsilon$: compare $\acute{\epsilon}\text{-}\gamma\epsilon\nu\text{-}\acute{o}\text{-}\mu\eta\nu$, $\gamma\acute{\iota}\text{-}\gamma\upsilon\omicron\mu\alpha\iota$; *genitus*, *gigno*, and the Sanscrit *jan*, *jajnati*. It will be understood, then, that when we call $\delta\alpha\kappa$ - the root of $\delta\acute{\alpha}\kappa\text{-}\nu\text{-}\omega$, $\tau\upsilon\pi$ - of $\tau\acute{\upsilon}\pi\text{-}\tau\text{-}\omega$, $\phi\upsilon\gamma$ - of $\phi\acute{\epsilon}\upsilon\gamma\omega$, $\pi\rho\alpha\gamma$ - of $\pi\rho\acute{\alpha}\sigma\sigma\omega$, &c., we are not speaking of the ultimate form of these words, but of that form, which, though a secondary one, forms the base of a large class of words, and of which the real ultimate elements are not known or not taken into the account. It is these quasi-monosyllabic roots which it is so difficult to recognize in consequence of the changes which the terminations produce upon them.

Although the distinction between the Indo-Germanic and Semitic languages consists principally in the more frequent internal modifications of the root in the latter family, yet we must not suppose that the roots in the Indo-Germanic languages are incapable of internal modification. Every root consists either of a vowel, or of at least one consonant and a vowel. Now if we alter the consonant or consonants we alter the root, as far as its immediate identity is concerned, for we are not speaking here of cognate roots as *li* and *ri*; but the vowel of a root containing consonants admits of many modifications, and even when the vowel constitutes the whole root, it is liable to a few regular changes. The reason is, that the vowel is merely a voice or sound produced by a greater or less opening of the mouth, and entirely dependent on the consonant or breathing which it articulates, whereas the consonants are all produced by distinct intentional motions of the tongue or lips, or both, and therefore constitute the intended meaning of the word. The difference between composition with constant prefixes and suffixes and modification of the root, between the external and internal modifications of the significant element, consists in this, that the former being pronominal additions can only affect the expression of local relations of the thing intended, the latter expresses a modification of the thing itself. As the roots in the Indo-Germanic languages are ultimately monosyllabic, the internal modification must of course be of less frequent occurrence and less various than the external.

The changes which it will be proper to notice in this chapter are, (I) reduplication of the radical consonant, or, in some cases, of the whole or greater part of the root, (II) prefixes consisting

of single letters, (III) in the case of quasi-roots, or roots ending with a consonant, assimilation produced by contact with the pronominal part of the word, (IV) modification of the root-vowel.

(I.) Between the roots of nouns and verbs as such, there is no essential difference. The verb and noun are distinguished by the constant pronominal endings which are attached to each and occasionally by the manner in which these endings are connected with the root. Reduplication, however, takes place in the verb much more frequently than in the noun, and with reason, for the intention of the reduplication is to convey an idea of repeated action, which is of course more frequently applicable to a verb than to a noun. It will be understood that the reduplication, of which we speak here, is essentially different from that which we have pointed out in the pronominal word designating the number "six". In that case a pronominal word, denoting position, and as such representing a certain number, signifies, when repeated or written twice, the double of that number, just as the word thus reduplicated itself consists of two pronominal words, each representing a number. But the reduplication of the root is merely an internal modification, intended to enable the sense to dwell longer on the word, and as such does not differ in kind from the *guna* or *anusvārah*, of which we shall speak in this chapter.

(II.) Many roots in the different Indo-Germanic languages have occasionally single letters prefixed, which do not belong to the root, for it generally appears without them, so that even when these letters are vowels we are not to conclude against the assertion that all proper roots are monosyllabic. The following are some instances:

1. $\check{a} = \check{e} = \check{o}$ prefixed.

$\check{a}$ -βληχρός	{ βληχρός, βλάξ,
	{ μαλακός,
$\check{a}$ -μαυρός	μαυρός,
$\check{a}$ -μέλγω	{ Latin <i>mulgeo</i> ,
	{ Germ. <i>melken</i> ,
	{ Eng. <i>milk</i> ,

ἀ-νήρ (Fa-νήρ)	{ Old Lat. <i>nero</i> , Sansk. <i>narah</i> , Zend <i>nairya</i> ,
ἄ-ποινα	ποίνη,
ἀ-σπάραγος	σπαργή, σφριγῶ,
ἀ-λείφω	λίπα,
a-perio	porta,
ἀ-στήρ (High German <i>ge-stirn</i>) }	{ Latin <i>stella</i> (for <i>sterula</i>), Zend <i>stero</i> , Eng. <i>star</i> ,
ἐ-λεύθερος	{ λαός, Germ. <i>leute</i> , Sclav. <i>liudi</i> , Anglo-Saxon <i>leod</i> ,
ἐ-ρυθρός	{ Eng. <i>ruddy</i> , Lithuan. <i>ruddus</i> , Latin <i>ruber</i> , <i>rufus</i> ,
(Sanskrit <i>k-ship</i>) { ἐ-ρείπειν }	ρίπτειν,
ἐ-ρετμός	Lat. <i>re-mus</i> ,
ἐ-νεροι	νέρθε,
ἐ-ρεύγω	Lat. <i>ructo</i> ,
ἐ-λαύνω	<i>lâmina</i> ,
ἐ-λαχύς	Sansk. <i>laghus</i> ,
ἐ-ρέφω	Eng. <i>roof</i> ,
ὄ-βριμος	βριθός,
ὄ-φρύς	Sansk. <i>bhrûs</i> ,
ὀ-δούς (ὀ-δόντης)	{ Lat. <i>dens</i> , Sansk. <i>dantas</i> ,
ὄ-βελος	βέλος,
ὀ-δάξ	δάκ-νω,
ὄ-νομα	{ Lat. <i>nomen</i> , Sansk. <i>nama</i> ,
ὄ-τλος	τλήμι,
ὀ-ρέγω	Lat. <i>rego</i> ,
ὀ-νύξ	{ Sansk. <i>nakha</i> , Germ. <i>nagel</i> ,
ὄ-νειδος	Sansk. <i>nîd</i> "to despise,"
ὀ-κρυοεῖς	κρύος.

2. Labials.

Eng. <i>b-reak</i> ,	}		$\rho\acute{\eta}\gamma$ - $\nu\nu$ - $\mu\iota$,
Icel. <i>b-raka</i> ,			
Lat. <i>f-ra-n-go</i> ,			
Eng. <i>b-road</i> ,	}		Lat. <i>latus</i> ,
Germ. <i>b-reit</i> ,			
Greek π - $\lambda\alpha\tau\acute{\upsilon}\varsigma$,			
Germ. <i>f-ragen</i> ,	}		Lat. <i>rogo</i> ,
Sanse. <i>p-rach</i> ,			
Lat. <i>f-luo</i> ,			
<i>p-luo</i> ,	}		{ Lat. <i>luo</i> ,
Lat. <i>p-iscis</i> ,	}		Gaelic <i>iasg</i> .
Welsh <i>p-ysg</i> ,			

3. Dentals.

τ - $\rho\acute{\iota}\beta\epsilon\iota\nu$	{	Germ. <i>reiben</i> ,
δ - $\acute{\alpha}\kappa\rho\nu$,	{	{ Sansc. <i>acru</i> ,
(<i>l-acryma</i>)		
δ - $\rho\acute{o}\varsigma\omicron\varsigma$		Lithuan. <i>aszara</i> ,
δ - $\rho\acute{e}\pi\omega$		Lat. <i>ros</i> ,
δ - $\acute{e}\rho$ - $\kappa\omega$	{	Germ. <i>rupfen</i> ,
Sanse. <i>d-riças</i> ,		
		{ Sansc. <i>rasa</i> ,
		$\lambda\iota\kappa\acute{o}\varsigma$,

4. Gutturals.

<i>g-lad</i>	Lat. <i>lætus</i> ,
High Germ. <i>ge-stirn</i>	{ Eng. <i>star</i> ,
	{ Zend <i>stero</i> ,
γ -λήνη, }	{ λάω,
γ -λαυκός, }	{ λευκός,
γ -λαύσσω, }	{ λεύσσω,
γ ά-λα (κτ), }	<i>lac(t)</i> ,
γ -λάγος, }	
(ἀ-μέλγω = ἀ-μλάγ-ω, }	
Sansc. <i>k-am</i>	Lat. <i>amo</i> ,
κ-λυτός	<i>loud</i> ,
Lat. <i>g-lubo</i>	Lettish <i>lobit</i> ,
Sansc. <i>g-rabh</i> , }	Lat. <i>rapio</i> ,
Icel. <i>g-ripa</i> , }	

Yorkshire dialect *c-lubstart*... Norfolk dialect *lobster*,
(=*clubtail*, a name for the stoat)

κ-νίσσα	<i>nidor</i> ,
χ-λιαρός	λιαρός,
χ-λαῖνα	<i>læna</i> ,
G-raf	<i>reeve</i> ,
C-lanius	Ital. <i>Lagno</i> ,
H-lodwig	<i>Ludwig</i> ,
k-nut	Lat. <i>nodus</i> ,
κ-άπρος	{ Lat. <i>aper</i> ,
	{ Germ. <i>eber</i> .

5. s.

σ-κέπαρνον (q. κέπαρνον, Od. v. 237)	{ ... κόπτω,
σ-κάπτω	
σ-τέλλειν	τέλλειν,
σ-τολή	ἀνα-τολή,
σ-τένω	τείνω (δύς-τηνος?)
σ-κάμανδρος	κάμανδρος,
σ-κεδάννυμι	{ κεδάννυμι,
	{ κεάζω,
	{ cut,
s-mash	<i>mash</i> ,
s-lash	<i>lash</i> ,
s-pike	<i>pike</i> ,
s-coop	<i>cooper</i> ,
s-plendidus	{ <i>plenus</i> (comp. <i>candidus</i> with <i>canus</i>).

In many of the vowel protheses it is easy to see that they correspond to the elements of prepositions. Thus in ἀ-μέργειν ὀ-μόργνυμι, ἀ-μάω ἀ-μέρδειν, ἀ-μείβειν = ἀμεύειν (ἀμεύσασθαι, Pindar, *Pyth.* I. 45; Hesych. s. v.; ἀμενσίπορος, Pind. *Pyth.* XI. 38; *a-moveo*), ἀ-μαρύσσειν (=ἀπο-στίλβειν, comp. μαρ-μαρ-ύ-γη), ἄ-ποινα, ἄ-σκος, ἄ-σπί(δ) (comp. σκύτος), &c. the prothesis is obviously the first part of the prepositions ἀ-νά, ἄ-πο, or the pronominal element ἀ, which, we have seen, is frequently used to express removal, distance, and, by inference, negation. The prefix seems rather to bear the meaning of the compound ἀ-νά

in ἀ-σπάραγος (“that which sprouts up”), ἀ-σταχυς, ἀ-λείφω (com. ἀναμύσσω), ὄ-φρυς, &c. In Φα-νήρ, as it was written in Homer, we have the older and fuller form *va* of the element *a*, which, as we have before suggested, is merely a mutilation of the first pronominal stem, used to express the strongest sense of separation. The initial *a* has a collective meaning, or stands for *sa* in ἀ-σπά-ζομαι, ἀ-κόλουθος, &c. But many of the vowels, and most of the gutturals and sibilants thus prefixed, are only added for the sake of euphony. Indeed this appears to be invariably the case with the short *e* prefixed to a word beginning with *s* and a consonant, as in a great number of French words; *e-space*=*spatium*, *e-sprit*=*spiritus*, *e-stomac*=*stomachus*, *é-cuyer*, old French *escuyer*, Ital. *scudiere*, Latin *scutiger*, *scutarius*, in English both *Esquire* and *Squire*. In this country we have a habit of prefixing such a vowel in pronunciation, whether we prefix it in writing or not. Thus many people pronounce *Xerxes* as if it were written *Exerxes*, and the same appears to have been sometimes the case with the people of Asia Minor. The word *σατραπήη*, defined by Herodotus (I. 192) as ἡ ἀρχὴ τῆς χώρας, is obviously explicable from the Sanscrit *kshêtra-m*, “a field”, and *pâ*, “to rule”. Now in an inscription found in Asia Minor we have ἐξαιθραπεύειν for σατραπεύειν, which is evidently the writing of a person who was much in the habit of hearing the Persian pronunciation of the word. The same is, perhaps, the case with the name Ἐξάθρης¹. The sibilant seems to be prefixed chiefly for the sake of additional emphasis; at least such is the general effect of this prothesis in our language, and it is for this reason that in cases of secondary prothesis *s* is the only prefix used, as in λίπα, ἀ-λείφω, *s-a-lbon*; *latus*, *t-latus* (τλητός), *s-t-latus*; *rip*, *t-rapping*, *s-t-rip*; *lis*, *s-t-lis*; *lentus*, *s-t-lentus*; *locus*, *s-t-locus*, &c. The labials appear for the most part to be prefixed to words the meaning of which would admit of such additional force as might be derived from composition with ἀ-πό, *a-pa*, *a-va*, *ab*, *off*, to the latter part of which the prothesis corresponds. A similar explanation is applicable to the dentals (comp. ἔ-τι, *a-ti*, *a-d*, &c.), and to the Latin prefix *re* (πα-ρά, *pa-ra*, &c.). We do not, however, believe there has been any aphæresis, as Pott suggests (*Etym. Forsch.* II. p. 156): the monosyllabic elements are shortened into single letters, in

1. Above p. 196.

Greek as in the German dialects (see Grimm, *Deutsche Grammatik*, II. p. 700), but we cannot admit the propriety of stating that, when a prefix presents traces of one of the elements of a compound word, the other part of that compound prefix must have been originally there: this amounts to a denial of the separate use of these elements, which, however, is too well known to be doubted.

(III.) When a root, or rather quasi-root, terminates with a consonant, and is combined with some element beginning with a consonant, we frequently lose all immediate traces of the original form of the root in consequence of its fusion with the termination. This process is generally called Assimilation; it may sometimes be termed Absorption, and in most cases would be included under those changes which we are accustomed to call euphonical. We may trace it in the melting down of two words into one by crasis, which we may observe in our common conversation, a crasis which in Sanscrit is sometimes extended through a whole sentence, and perhaps there is something similar to it in principle in the alliteration so exceedingly common in the Latin writers (see Näke, *de Alliteratione Serm. Lat.* in the *Rhein. Mus.* for 1829, p. 324 foll.).

It will be convenient to consider the different kinds of Assimilation separately. They are, (1) Assimilation proper, or doubling one of two consonants which meet in a word, and leaving out the other. (2) Doubling a consonant to replace a vowel which follows it. (3) Absorption and compensation in either of the two last mentioned cases. (4) Substituting $\sigma\sigma$ or $\tau\tau$ for a consonant and vowel. (5) Change of a consonant to one more symphonic with a succeeding consonant. (6) Insertion of a symphonic consonant in certain cases. (7) Omission of the final consonant of the root when it is identical with one in the termination.

(1) Assimilation of the first consonant to the second: $\acute{\epsilon}\nu\nu\text{-}\mu\iota$ for $\acute{\epsilon}\sigma\text{-}\nu\nu\text{-}\mu\iota$ ($\text{F}\acute{\epsilon}\text{s-}\nu\nu\mu\iota$, Sanscr. *vas*, Lat. *ves-tis*); $\acute{\alpha}\mu\mu\epsilon\varsigma$, $\acute{\upsilon}\mu\mu\epsilon\varsigma$, for $\acute{\alpha}\sigma\mu\epsilon\varsigma$, $\acute{\upsilon}\sigma\mu\epsilon\varsigma$ (*Vêda asmê, yushmê*); $\kappa\omicron\mu\mu\acute{\omega}$, from $\kappa\acute{\omicron}\sigma\text{-}\mu\omicron\varsigma$, $\kappa\alpha\theta\text{-}\alpha\text{-}\rho\acute{\omicron}\varsigma$, Bœot. $\kappa\omicron\theta\text{-}\alpha\text{-}\rho\acute{\omicron}\varsigma$, Sanscr. *çudh*; *flam-ma* from *flag-ro*, $\phi\lambda\acute{\epsilon}\gamma\omega$; *il-lustris* for *in-lustris*, &c.

Assimilation of the second consonant to the first: κορρῆ for κορ-σῆ, ὄλ-λυμι for ὄλ-νυμι, ἵπ-πος, ἵκ-κος, for *eq-vus*, Sanscr. *asvas*, Pers. *aspas*.

(2) The vowel *ι* is frequently represented by a doubled λ or σ: ἄλ-λος, *ol-lus*, ἰλ-λε, *al-ius*, Sanscr. *an-ya*; φύλ-λον, *fol-ium*; μάλ-λον, *μάλιον*; μέσσοσ, *μέσιος*. Frequently the doubled σ represents a guttural or dental succeeded by *ι*, as in θάσσον for τάχιον, κρέσσω for κρατίων.

(3) Absorption of and compensation for a consonant: λέγων, for λέγοντς; ἵππους, for ἵππον-ς; χαριεῖς for χαριέντς.

Absorption of and compensation for a vowel: τύπτεις for τύπτεσι; γενέτειρα for γενετερία.

(4) The present tense of a verb, or that on which its peculiar conjugation depends, is generally a longer form than the other tenses: it contains besides the root an unorganic, and generally a pronominal addition. This addition is very often one of the equivalent pronominal elements τ, ν, the relative element *-ya*, or a compound of two pronominal elements, σδ or σκ. Thus from the roots τυπ-, τεμ- we have the present tenses τύπ-τ-ω and τέμ-ν-ω: we have both ἀτιμάω and ἀτιμάζω=ἀτιμά-σδω; both γηράω and γηρά-σκω. The element *ya* appears to be concealed in the contracted verbs, as they are called, and in the very large class of verbs which form the present in -σσω, or, what is only a dialectical variety, in -ττω. In all these last it is obvious that assimilation has taken place: the only question is, with which of the terminations mentioned above the last consonant of the root has been consolidated. This question cannot be answered without a removal of the difficulties which have always been experienced by etymologists in fixing the value of the letter ζ. This letter, as we have already shown from its position in the alphabet, is an assibilated or softened δ. As an assibilated δ it is equivalent to σδ, and under this form it is frequently found in the dialectical varieties of the Greek language. As a softened δ it is equivalent to δγ, or the English soft *g* or *j*, represented in modern Italian by *gi* or *ge*, all of which are ultimately represented by the sound *sh*. This appears from investigations in the Greek language only; thus Ζεύς (=ΖεFs), genitive διFός, ζα- =διά, μέζων or μείζων=μεγίων, ὀλίζων=ὀλι-

γίων, πρωϊ-ζός, χθι-ζός=πρωϊ-δίος, χθι-δίος, “the before-day,” “the near day” (for according to Macrobius *Saturnal*, I. 15, *Jovem accipimus lucis auctorem, unde et Luctetium Salii in carmine canunt, et Cretenses Δία τὴν ἡμέραν vocant, ipsi quoque Romani Diespitrem appellant, ut diei patrem*). A comparison with other languages leaves no doubt whatever on the subject; compare ζεύγον with Sanscrit *yuj-*, Latin *jug-um*; *juturna* with *diuturna*; *Janus* with *Diana*; *jubar* with Sanscrit *div*, *dya*, Latin *dies*, Italian *giorno*; ζέα with Sanscrit *java*; ζιγγίβερι, with “ginger”; ζύζυφος with “jujube,” ζάω with Sanscrit *jīv*, Lithuan. *gyvs*, *gyvenû*, *gyvatâ*; Slavonic *schivû*, &c. As a compound of the two letters σδ, ζ admits of both modes of proper assimilation: the σ is assimilated to the δ in μάδδα for μάζα, in πλάδδω for πλάζω, &c.; the δ to the σ in νίσσω for νίζω, ἀοσσεῖν from ἄοζος, λαπάσσω for λαπάζω, &c. Those verbs which are assimilated in -σσω very often return to the former assimilation, thus for σφάζω we have σφάττω.

Having now determined the two values of ζ, and therefore of the termination -ζω, we shall be able to establish with more accuracy the nature of the assimilation of verbs in -σσω, -ττω. Buttmann stoutly denies the possibility of such an ending as -σσω without an included guttural (*Lexilog.* II. p. 111), and would even go so far as to derive ἀλλάσσω from ἀλλαχού (II. p. 198). But, besides the fact which we have just mentioned, that -ζω may be assimilated to -σσω, the contrary is established by the instances quoted by Lobeck (*Paralipomena*, p. 403): namely, ἀφάσσω, κλαδάσσω, κλυδάσσω, παλάσσω, σπαράσσω, ἀλθέσσω, ἐδρήσσω, λαφύσσω, λιμώσσω, &c. Leaving out these words, and such as φράζω, root φραδ-, ὄζω, root ὀδ-, which evidently belongs to the 7th class of assimilations, the root δ being omitted in accordance with the Greek rule which does not permit a dental to stand before a sibilant (compare φυγὰς for φυγαδς, πράγμασι for πράγματσι, &c.),—we must consider those in which a final consonant of the root is actually contained and concealed in the assimilation. (1) Gutturals: πράσσω, root प्राγ-; τάσσω, root ताγ-; αἴσσω, root aik-, айγ-; φρίσσω, root фрик-; ῥήσσω, root ῥήγ-; πλήσσω, root πληγ-; δράσσω, root δραγ-; (2) Labials: πέσσειν, root πεп-; ἐνίσσειν, root ἐнип-; λάζομαι, root лаб-; νίπτειν, νίσσειν, νίζειν; κόσσειν, κόπτειν. (3) Dentals: κορύσσειν, root корυθ-; ἐρέσσειν, from ἐρετ-.

Now it is quite clear that these verbs are not formed by a mere addition of $-\sigma\omega$ to the root: by this addition the futures of all of them are formed, and it would be absurd to suppose that the only difference between a present and future should be an assimilation of one of them. It is obvious, then, that the termination must be one of the pronominal endings τ , ν , $\sigma\kappa$, $\sigma\delta$, or $γα$. The termination thus affixed cannot be τ or ν , for there is no instance of the assimilation of these letters with any preceding consonant. Nor can it be $-\sigma\delta$, or $-\sigma\kappa$ appended to a root ending with a guttural or dental, for then the assimilation takes place according to (7), as $\acute{\omicron}\zeta\omega$ for $\acute{\omicron}\delta-\sigma\delta\omega$, $\phi\rho\acute{\alpha}\zeta\omega$ for $\phi\rho\acute{\alpha}\delta-\sigma\delta\omega$, $\lambda\acute{\alpha}\sigma\kappa\omega$ for $\lambda\acute{\alpha}\kappa-\sigma\kappa\omega$, $\mu\acute{\iota}\sigma\gamma\omega$ for $\mu\acute{\iota}\gamma-\sigma\kappa\omega$. The only way in which the ending $-\sigma\sigma\omega$, $-\tau\tau\omega$ can arise, is from an assimilation of the ending $\sigma\delta$ affixed to roots terminating with a vowel, or of a guttural or dental with the pronominal ending $γα$. It has been mentioned before that both gutturals and dentals, when followed by $γ$, are softened into sibilants, a softened guttural being equivalent in many cases to a softened dental, and thus both are represented by ζ (compare $\acute{\omicron}\lambda\acute{\iota}\zeta\omega\nu$ with $\acute{\omicron}\lambda\acute{\iota}\gamma\omicron\varsigma$, and $\Delta\acute{\iota}\omicron\varsigma$ with Zeús). Accordingly, it is probable that in the majority of cases the guttural or labial has become softened into a sibilant by the addition of the pronominal element $ια$, Sanscrit $γα$, which is represented by a doubling of the sibilant, so that $\pi\rho\acute{\alpha}\sigma\sigma\epsilon\iota\nu$ may stand $\pi\rho\alpha\gamma\acute{\epsilon}\epsilon\iota\nu$, or $\pi\rho\acute{\alpha}\gamma\gamma\epsilon\iota\nu$, as $\theta\acute{\alpha}\sigma\sigma\omicron\nu$ stand for $\tau\alpha\chi\acute{\iota}\omicron\nu$, and $\acute{\epsilon}\rho\acute{\epsilon}\sigma\sigma\epsilon\iota\nu$ for $\acute{\epsilon}\rho\epsilon\tau\acute{\epsilon}\epsilon\iota\nu$ or $\acute{\epsilon}\rho\acute{\epsilon}\tau\gamma\epsilon\iota\nu$, as $\kappa\rho\acute{\epsilon}\sigma\sigma\omega\nu$ for $\kappa\rho\alpha\tau\acute{\iota}\omega\nu$. This appears more clearly in the verb roots which have liquid endings; here the iota is occasionally transposed to counterbalance an omission of one of the liquids: compare $\phi\theta\acute{\epsilon}\rho\omega$, $\gamma\acute{\epsilon}\iota\nu\omega$, $\kappa\tau\acute{\epsilon}\iota\nu\omega$, with the old forms $\phi\theta\acute{\epsilon}\rho\rho\omega$, $\gamma\acute{\epsilon}\nu\nu\omega$, $\kappa\tau\acute{\epsilon}\nu\nu\omega$. Compare also $\chi\rho\alpha\iota\sigma\mu\acute{\epsilon}\iota\nu$ with $\chi\rho\acute{\eta}\sigma\iota\mu\omicron\varsigma$. The appearance of this ending after roots terminating in labials can not be explained in this way. In all the labial-verbs which have by-forms in ζ and $\sigma\sigma$, the labial seems to stand for a digamma, which has been in some cases omitted without compensation, and in others represented only by its guttural element: Thus in $\nu\acute{\iota}\sigma\sigma\epsilon\iota\nu$, $\nu\acute{\iota}\zeta\epsilon\iota\nu$, $\nu\acute{\iota}\pi\tau\epsilon\iota\nu$, the root is $\nu\beta$ -, judging from $\chi\epsilon\rho$ - $\nu\acute{\iota}\beta$ - α , &c. That however this β is the representative of a digamma, and that the real root is $\nu\epsilon F$, appears from the verb $\nu\acute{\epsilon}\omega$ ($\nu\epsilon F\omega$), $\acute{\epsilon}\nu\epsilon\nu\sigma\alpha$, $\nu\acute{\epsilon}\upsilon\sigma\omicron\mu\alpha\iota$, &c., $\nu\alpha\upsilon\varsigma$, *navis*, &c. which convey the general idea of "being in the water." Hence *Nep-tunus*,

“the god of the sea.” In many of the formations from this root as νέως, νῆσος, νίτρον for νίπτρον, &c., the digamma has vanished; in the case of νί-ζω, νί-σσω, then, we may suppose that these terminations are merely suffixed to the root denuded of its terminating digamma-sound. The same may be said of λά-ζομαι, from the root λαβ- or λαF, λεF. In πέσσειν, from πεπ-, it will be recollected that the labials between which the root-vowel is confined are represented in the Latin *co-qvo* by a guttural and the digamma; the second labial is still a softened guttural in the Sanscrit *pach-*. The same is to be observed of ἐνίσσειν, ἐνίπτειν (whether it is connected with ἔπος, *voc-s*, Sanscr. *vâch*; with ἔπομαι, *sequor*, Sanscr. *sañj*; or with νίκ-η, νείκος;) and of ὄσσομαι, ὀπτομαι; ὄσσε, ὄψις, τριοττίς, τριοπίς; comp. Latin *oculus*, Sanscrit *îksh*. The idea of striking conveyed by κόπτειν is derived from that of butting with the head (κερωτυπεῖν, &c.), and all the cognate words point to this union of stooping and striking in the meanings of the word: compare κύπ-τειν, κυβερνᾶν (to direct the head of a ship), *cub-are* (to lay down the head), *cap-ut*, κεφαλή, Sanscrit *kapâla*. But besides the root *cap-*, κοπ-, for “a head,” we have also an accessory root κορ-, κορ-σῆ, κόρυθ-ς, Sanscrit *çirsha*, &c., with the same additional meanings of butting, striking, as in κέρ-ας. From this second root comes by assimilation κόσσος, κοσσεῖν, κόττα, κότταβος, &c., which therefore have no immediate connexion with κόπτειν, &c. With regard to κορύσσω, κορύπτω, κορύπτιλος, κορύπτιλος, it will be remembered that there is a form κορύθ-ς, as well as κορυφή. On the whole, then, it appears, that the barytone verbs in -σσω or -ττω, are properly assimilations either of the suffix -ζω, or of a guttural or dental at the end of the root with the pronominal suffix *ya*.

This assimilation of a guttural or dental succeeded by *i* or *y* into σσ or ττ, which we have been endeavouring to establish in the case of barytone verbs, appears much more clearly in the case of certain feminine nouns, in which Bopp, erroneously as we believe, supposes that the original feminine *i* is not represented (*Vergl. Gramm.* p. 140). Such words are Θράσσα for Θράκια, βασίλισσα for βασιλίδια, ἄνασσα for ἀνάκια, μέλισσα for μελίτια. Before *i* the δ and τ are naturally assibilated, as in ζα from δια, θανάσιμος from θάνατος; the κ becomes *s* through the intermediate sound *ch*, *sh*, as in modern languages; com-

pare *camera*, *chamber*, *chambre*, and when two vowels follow a *t* or *c* the sound in both may be the same; compare *redemption*, *Lucien*. The same is also the case in the feminines of adjectives and participles in *-ντ*: thus, for *χαριέντια* we have *χαριεν*(^{τ_{sh}})*α*, *χαριενσα*, and, by assimilation, *χαρίεσσα*; for *τυπτόντια* we have *τύπτον*(^{τ_{sh}})*α*, *τύπτονσα*, and, by absorption and compensation, *τύπτουσα*; for *τυψάντια* we have *τυψαν*(^{τ_{sh}})*α*, *τυψάνσα*, by absorption (and in the older form by compensation also), *τύψασα*, Dorice *τύψαισα*. In *μέλαινα*, *τέκταινα*, &c. the feminine *i* is only forced back a syllable; there is no *τ* in the masculine, and therefore there could be no *σα* from *τια* in the feminine. With *θείαινα*, *λύκαινα*, *δέσποινα*, the case is different, and we might imagine primitive masculines *θέας* (for *θέανς*), *λύκας* (*λύκανς*), and *δέσπων*. In regard to the latter we must remark, that the Sanscrit has both *pati-s*, “a master”, and *patnî*, “a mistress”; the Greek too has *δεσ-πότης* and *πότνια* corresponding to these (see Rosen, *Journal of Educ.* Vol. viii. p. 346).

(5) This rule is most frequently exemplified in compounds with prepositions: as *ἐμβάλλω* for *ἐνβάλλω*; *ἀμφί* for *ἀναφί*, &c. We have *σ* for *δ* in certain words, as *ἄσμα* from *ἄδω*, *οἰσ-θα* for *οἰδ-θα*, *ἥσ-θην* from *ἥδω*; *ἐσ-θίω*, root *ἐδ-*, &c., and this takes place in some cases when there is in fact no actual composition but only an immediate succession: thus we have in inscriptions *ἐμπυρί*, *συγκαρπῶ*, *ἐστήλη* for *ἐν πυρί*, *σὺν καρπῶ*, *ἐν στήλῃ*.

(6) The Greek ear seems to be particularly averse to the immediate concurrence of *μλ*, *μρ*, *νρ*, *νσ*, *σρ*, *σλ*, and whenever, by contraction or otherwise, any of these pairs of liquids have come in contact, the mute which bears the nearest relation to the first of them is inserted, unless assimilation takes place, or one of the liquids is omitted, which generally happens in the combinations *νσ*, *σρ*: thus *β* is inserted after *μ*, *δ* after *ν*, and *θ* after *σ*; for example, we have *μέμ-β-λεται* for *μεμέληται*; *μέμ-β-λωκα* from *μολεῖν*; *ἄμ-β-ροτος* for *ἄ-μορτος*; *γαμ-β-ρὸς* for *γαμερός*; *μεσημ-β-ρία* for *μέση ἡμέρα* and *ὄμ-β-ρος* compared with *humor*; we have *ἀν-δ-ρὸς* for *άνέρος*, and *ἐσ-θ-λὸς* for *ἐσλός*. When *μ* is inserted before *π* or *β* as in *ἀ-μ-πλάκημα*, *πί-μ-πλημι*, *ὄ-μ-βριμος*, &c., it is merely an instance of *anusvāra*.

There is one word in which this insertion of *β* has not been observed by Greek scholars, and as it has occasioned some diffi-

culty and misconception, it will be worth while to explain it more at length. We allude to *ἀμ-β-λύς*, which appears to us to be merely another form of *ἀμα-λός* and *ἀμαν-ρός*, with both of which it coincides to a certain extent in signification. The primary meaning appears to be “smooth”, “reduced to a level”, as opposed to any word signifying “pointed”, “projecting”, “sharp”; hence, by a natural transition, it implies want of vigour or energy,—the weak, timid, or tender. It is also applied to express the fading of colours, loss of the vivid freshness which once distinguished them, &c. The first syllable appears to be one of those prefixes of which we have spoken above. At least, the word *μαν-ρός* appears separately, and *μα-λα-κός*, its synonym, seems to be only another form of *ἀμ-β-λύς*, the second pronominal stem being appended under the shape *-κός* instead of *ύς*. *Μα-ρα-ίνω*, which in its earliest use signifies “to extinguish fire” (Homer, *Hymn. Merc.* 140), and which is particularly opposed to *φλέγω* (Soph. *Ajax*, 700), seems to be a derivative of *μανρός*. As we have *ἀμβλύσκω*, *ἀμβλυωπῶ*, *ἀμβλόω*, from *ἀμβλύς*, so we have also *βλώσκω*, *βλωθρός*, and *ἀβληχρός*, as well as *βληχρός*, *βλάξ*. The verb *βλώσκω* and its aorist *ἔμολον* (comp. *θρώσκω*, *ἔθορον*; *θνήσκω*, *ἔθανον*;) signify “to go”; this meaning arises naturally from the sense of levelling, smoothing, clearing away, so prominent in the adjectives which we have mentioned first. It is curious to observe generally how words denoting sharpness, a point, acuteness, &c., are applied to convey the ideas of rapid motion, and, metaphorically, readiness of wit, while those indicating a level, smoothness, bluntness, &c., are used to signify slowness, dullness, &c. This is particularly the case in Greek. The reader will remember such phrases are *ἀμβλὺν ξιφίδιον*, *ἀμβλὺν ὁρᾶν*, *οἱ ἀμβλύτεροι τὴν φύσιν* (to which meaning we refer the gloss in Hesychius, *ἄβλας. ἀσύνετος, ἀγνώμων*), *ἀμβλὺς πρὸς δρόμον*, *ἀμβλύτερος πρὸς τὴν μάχην*, on the one hand, as opposed to *ὄξυ φάσγανον*, *ὄξύτατον δέρκεσθαι*, *ὄξυς ἐπινοῆσαι*, *ὄξύτατοι ἵπποι* (Herod. V. 9). We also find *ἀμβλὺς* opposed to *πικρός*, the original signification of which is undoubtedly “piercing”, “penetrating”, “sharp”. As *πικρός* in its metaphorical use is particularly applied to denote that which is painful or galling to the feelings, so *ἀμβλὺς* is employed to express the effect of appeasing or removing disagreeable or distressing sensations: thus Thucydides

(II. 65), ὧν περὶ τὰ οἰκεῖα ἕκαστος ἤλγει, ἀμβλύτεροι ἤδη ὄντες. We believe the root of ἀμ-β-λύς, ἀμα-λός, ἀμαν-ρός, is found in ἀμάω; the opinion of the Lexicographers that this verb is connected with ἄμα, and means to collect, to gather together, appears to us quite erroneous, and we cannot conceive how modern scholars could adopt this view, which seems to be quite at variance with the common usage of ἀμάω and its compounds. In all the passages in which it appears, ἀμάω means "to make a level surface", "to lay flat or even", and, when applied to corn, which is emphatically said φρίσσειν, "to stick up" or "stand on end" (*horrere*), (*Iliad* xxiii. 599) it means "to cut down", "to lay down". The following passages will make this clear. When earth is said to be laid smoothly over any thing, as on a grave, the phrase is ἐπαμάσθαι γῆν. Herodot. VIII. 24, τάφρους ὀρυζάμενος ἔθαψε, φυλλάδα τε ἐπιβαλὼν καὶ γῆν ἐπαμησάμενος, on which Valckenaer quotes from Plutarch, τὸ λειότατον ἐπαμάται τῆς θινὸς αὐτοῖς καὶ μαλακώτατον. The two epithets in this passage of Plutarch show clearly that smoothness, and not collection or congeries, is intended. In the same way Homer speaks of smoothing or making level a bed of leaves, with which, he says, the ground was covered, so that there was no need of collecting them, *Odyss.* v. 483,

ἄφαρ δ' εὐνὴν ἐπαμήσατο χερσὶ φίλησιν
εὐρεῖαν· φύλλων γὰρ ἔην χύσις ἥλιθα πολλή.

Also of milk laid out in *broad* dishes for the purpose of forming cream, *Odyss.* ix. 247,

αὐτίκα δ' ἤμισυ μὲν θρέψας λεύκοιο γάλακτος
πλεκτοῖς ἐν ταλάροισιν ἀμησάμενος κατέθηκεν.

It is only by perceiving this sense of the word that we can translate a well known passage of Sophocles (*Antig.* 600), where Askew's emendation, κοπίς, is absurd,

νῦν γὰρ ἐσχάτας ὑπὲρ
ρίζας τέτατο φάος ἐν Οἰδίπου δόμοις,
κατ' αὖ μιν φοινία θεῶν τῶν
νερτερῶν ἀμᾶ κόνις.

A light had beamed upon the root, but the dust was levelled over it, and made it ἀμανρὸν again. As the Greeks said κατα-

μᾶσθαι κόνιν, so also conversely they could say καταμᾶ ἢ κόνις. Hence it is, that, when they speak of penetrating a surface lying flat or level over something they wished to get at, they used the verb διαμᾶσθαι, as in Thucyd. IV. 26, διαμώμενοι τὸν κάχληκα, or διαμᾶν in poetry, as in Eurip. *Bacchæ*, 701, ἄκροισι δακτύλοισι διαμῶσαι χθόνα.

It will be proper, as well for this as for other reasons, to examine minutely a passage in Æschylus, in which the meaning of ἀμβλὺς has not been properly understood. It is in the *Eumenides*, 229, Müller,

ἤκω, δέχου δὲ πρηνεμένῳς ἀλάστορα,
οὐ προστρόπαιον, οὐδ' ἀφοίβαντον χέρα,
ἀλλ' ἀμβλὺν ἤδη, προστετριμμένον τε πρὸς
ἄλλοισιν οἴκοις καὶ πορεύμασιν βροτῶν.

We do not agree either with Müller or Hermann in their reading and interpretation of this passage. Hermann's προστετριμμένον μύσος is quite unjustifiable; it appears to us quite unmeaning, and is supported by no evidence, either internal or external. We have no hesitation in saying that Müller is wrong in taking πρὸς adverbially: it is obvious from v. 429, πάλαι πρὸς ἄλλοις ταῦτ' ἀφιερῶμεθα οἴκοισι, καὶ βοτοῖσι καὶ ῥυτοῖς πόροις (comp. 272, πρὸς ἐστία θεοῦ), that πρὸς agrees with the following datives. Hermann seems to think that the last words of v. 430 contain an explanation of the πορεύμασιν βροτῶν (*Opuscul.* VI. p. 46). But the καὶ βοτοῖσι καὶ ῥυτοῖς πόροις are not connected with οἴκοισι; they are datives of the instrument: "I have been purified at other places by means of sacrifices and the pouring out of water". The πορεύματα βροτῶν is only a general expression—"where men go". We have νάϊον πόρευμα in Euripides (*Iphig. Aul.* 300), and Hermann, who has read Æschylus so often, might have recollected τέκνων κέλευθοι (*Choeph.* 350), and τρίβοι ἐρώτων (*Suppl.* 1042). Müller again has lost sight of the connexion, and has mistranslated ἀμβλὺς, which does not here mean *abgestumpft*, i. e. "blunted", but implies a fading or loss of colour, i. e. of the colour of blood, as below v. 270:

βρίζει γὰρ αἷμα καὶ μαραίνεται χερός,
μητροκτόνον μίασμα δ' ἐκπλυτον πέλει.

ποταίνιον γὰρ ὃν πρὸς ἐστία θεοῦ
Φοίβου καθαρμοῖς ἠλάθη χοιροκτόνοις.

In the passage of Æschylus now under consideration we read *προσ τετραμμένον* in the sense in which *προστράπεσθαι* occurs in v. 200,

καὶ προστράπεσθαι τούσδ' ἐπέστελλον δόμους,

for *προστράπεσθαι δόμους* is surely not very unlike *προσ τετραμμένον πρὸς οἴκοις*; and the sense of these lines is as follows: "I am not a polluted person, i. e. an applicant or suppliant for purification; nor is there the stain of blood upon my hand; but that stain is washed out and faded away, and I have prayed for purification at other temples and in the haunts of men." So that *ἀμβλὺς* is synonymous with *οὐκ ἀφοίβαντος χέρα*, and *προσ τετραμμένος* with *οὐ προστρόπαιος*, a sort of tautology very common in Æschylus.

In a fragment of the *Æolus* of Euripides (*apud Galen. Charter.* p. 418, Kühn) we have:

εἰ μὲν τόδ' ἡμαρ πρῶτον ἦν κακουμένῳ,
καὶ μὴ μακρὰν δὴ διὰ πόνων ἐναυστόλουν,
εἰκὸς σφαδάζειν ἦν ἄν, ὥς νεόζυγα
πῶλον χαλινὸν ἀρτίως δεδεγμένον.
νῦν δ' ἀμβλὺς εἰμι καὶ κατηρτυκῶς πόνων,

where *ἀμβλὺς* is obviously applied not to any loss of colour, but to a taming of the fiery spirit of a young horse, as appears even from Cicero's loose translation (*Tuscul. Disput.* III. 28):

Sed jam *subactus* miseriis obtorpuī.

We may take this opportunity of explaining the participle *κατηρτυκῶς*, which occurs in this passage of Euripides, and in the *Eumenides* v. 451.

ἄλλως τε καὶ σὺ μὲν κατηρτυκῶς ἐμοῖς
ικέτης προσῆλθες καθαρὸς ἀβλαβὴς δόμοις.

The word *καταρτύνομαι* and the perfect participle *κατηρτυκῶς* are applied to signify arriving at maturity, and the effects of age in sobering the passions of youth. Thus Solon says (p. 66, *Bach*):

τῇ δ' ἐκτῇ περὶ πάντα καταρτύεται νόος ἀνδρός,
οὐδ' ἔρδειν ἔθ' ὁμῶς ἔργ' ἀπάλαμνα θέλει.

which should be translated, "At the age of 42 the mind of man is matured in every respect (for the use of *περί*, comp. Plat. *Resp.* V. p. 449 A. *κακὰς καὶ ἡμαρτημέναι περὶ πόλεων διοικήσεις*), nor does he now commit the intemperate actions of his youth" (*ὁμῶς* i. e. as he did before). For the use of *ἀπάλαμνα*, see Theognis v. 481. From this meaning of *καταρτύνω* we derive its use to signify the effects produced by training, especially upon horses, to which the passage of the *Æolus* particularly refers. See also Sophocl. *Antig.* 478.

σμικρῷ χαλίνῳ δ' οἶδα τοὺς θυμουμένους
ἵππους καταρτυθέντας.

Plutarch. *Themist.* c. II. τοὺς τραχυτάτους πώλους ἀρίστους ἵππους γίγνεσθαι φάσκων, ὅταν, ἥς προσήκει, τύχῳσι παιδείας καὶ καταρτύσεως. Vol. I. p. 31 D. ἵππους—καταρτύνοντες ἐπὶ τοὺς ἀγῶνας ἄγουσιν. p. 38 D. καταρτύνῃ τὴν φύσιν. From this is derived the peculiar meaning of *κατηρτυκῶς*—"a horse or ass which has cast its teeth," i. e. "aged," because his age can no longer be known from his teeth, which are therefore called *γνώμονες*, or *φραστῆρες*, "the index of age." Suidas. Ἀβολήτωρ καὶ ἄβολις καὶ ἄβολος, ὄνος ὁ μηδέπω βεβληκῶς ὀδόντας, ἐξ οὗ γνωρίζεται ἡ ἡλικία τοῦ ζώου. ἐκ δὲ τούτου ὁ νέος, οὐδέπω γνώμονα ἔχων. γνώμονα δὲ ἔλεγον τὸν βαλλόμενον ὀδόντα, δι' οὗ τὰς ἡλικίας ἐξήταζον· τὸν δὲ αὐτὸν καὶ κατηρτυκότα ἔλεγον, ἐκ μεταφορᾶς τῶν τετραπόδων. καὶ ἀπογνώμονας, τοὺς ἀπογεγηρακότας, οἷς ἐλελοίπει τὸ γνῶρισμα. καὶ ἄβολους πώλους τοὺς μηδέπω βεβληκότας ὀδόντας. Hesychius Ἀβολος. νέος, οὐδέπω ρίψας ὀδόντα. τὸν δὲ αὐτὸν καὶ κατηρτυκότα ἔλεγον. Γνώμα τὸν βαλλόμενον ὀδόντα, δι' οὗ τὰς ἡλικίας ἐγνώριζον τῶν τετραπόδων. καὶ ὁ κατηρτυκῶς ἤδη, λειπογνώμων. λέγεται δὲ καὶ γνῶσις. Κατηρτυκῶς. τελειώσας. κυρίως δὲ ἐπὶ τῶν ἀλόγων ζώων, ὅταν ἐκβάλῃ πάντας τοὺς ὀδόντας. Λειπογνώμων, ὁ μηκέτι βόλον ἔχων· ὁ δὲ τέλειος, καὶ γεγηρακῶς μὴ ἔχων γνῶρίσματα τῆς ἡλικίας. Malala *Chron.* p. 379 (quoted by Toup. III. p. 539): πρωτοβόλος. *Pullus, qui primos dentes emittit.* From this it appears that in the passage of Euripides *κατηρτυκῶς* is used in its

secondary and more limited sense as indicating the age of a horse, and so the *Antiatticistes* (*Bekkeri Anecd.* p. 105 l. 25) understood it: Κατηρτυκέναι ἐλέγοντο οἱ μηκέτι βόλον ἔχοντες ἵπποι. Εὐριπίδης Αἰόλῳ. While in the passage of Æschylus (*Eumenides* 451) κατηρτυκῶς is taken in its wider signification, "having performed or completed," i. e. all the necessary rites, just as τέλος, τελέω, τέλειος, τελειόω are used absolutely in speaking of the performance of sacred rites, although they only denote completion or fulfilment in general, and τέλειος is used like κατηρτυκῶς, in speaking of the age of animals in opposition to ἄβολος. Plato *Legg.* VIII. p. 834 c. μονίπποις τε ἄθλα τιθέντες, πώλοις τε ἄβόλοις καὶ τελείων τε καὶ ἄβόλων τοῖς μέσοις καὶ αὐτοῖς δὴ τοῖς τέλος ἔχουσι. The Scholiast, on the passage of Æschylus, felt this, when he wrote κατηρτυκῶς. τέλειος τὴν ἡλικίαν. τοῦτο δὲ ἀπὸ τῶν ζώων: and Hesychius too; καταρτύναι. κατασκευάσαι. τελειῶσαι. στερεῶσαι. Also St Paul (*Corinth.* II. xiii. 11) καταρτίζεσθε, "be perfect." Καταρτύνω is used in this more general sense in Soph. *Æd. Col.* 71, ὡς πρὸς τί λέξων ἢ καταρτύσων μολεῖν; on which Suidas writes καταρτύσων. παρασκευάσων. εὐτρεπίσων. And thus we have, in the use of ἀμβλὺς and κατηρτυκῶς by Æschylus and Euripides, a fruitful instance of the manner in which two authors nearly contemporary may employ two words in connexion with one another with a marked difference, but yet with an affinity of meaning that cannot be mistaken.

(7) Of this rule we find frequent exemplifications in verbs and verbal compounds, both in Greek and in Latin. Thus διδαχή, διδάσκειν; *docere, discere*; δικάειν, δίσκος; λακεῖν, λάσκω; εἶκω, εἶσκω; εἰπεῖν, ἴσκειν; ἔχω, ἴσχω (ἐχ-σκω); λέγω, λέσχη; μιγῆναι, μίσγω, *misceo*; παθεῖν, πάσχω; μόγ-ος, μόσχος (*comp. vacca, vehere*); αἶδω, αἶσχος; ἐξ (ἐκ), ἔσχατος, &c.

We may mention as outwardly connected with assimilation, though in fact by no means proceeding from the same cause, the very common practice of doubling liquids in Greek words where no compensation is necessary or intended. Instances of this we have in ἐλλαπίνη, κέφαλλος, ὠτελλά, μάγερρος, μέλλιχος, ξέννος, φάεννος, χόλλιδες, &c. This is particularly remarkable in some proper names which occur in the Attic Dramatists; as Ἴππομμέδοντος (*Æsch. Sept. c. Theb.* 488), Παρ-

θερνοπαῖος (*id. ibid.* 547), Τελλεύταντος (*Soph. Ajax.* 210), Ἀλφεισίβοιαν (*Soph. ap. Priscian.* p. 1328), Ἴπποδάμου (*Aristoph. Equit.* 328), in some of which passages editors of the Porsonian school have introduced alterations as forced as they are unnecessary.

An inquiry into the rules of assimilation might lead us to an investigation of a converse phenomenon in the Greek and other languages, which Pott (*Etym. Forsch.* II. p. 65, foll.) calls *dissimilation*. This consists in the avoidance of a concurrence of similar syllables and letters, hiatus of vowels, and so forth; and euphony is alleged as the cause of this as well as of its opposite. We do not think, however, that this so-called dissimilation is due to anything beyond accident or caprice, a wayward choice or an accidental mispronunciation. That the Greek ear often repudiated such concurrences, and that many Greek words, especially compounds, have lost in consequence essential consonants, is well known (see Lobeck *Paralipom. Dissertatio prima*); but it is equally certain that they had, when the fit took them, a strong predilection for alliteration, an irresistible propensity to assimilation in words and *homœoteleuta* in sentences, of which their constant use of the *figura etymologica* is a sufficient proof. Of their dislike to a concurrence of aspirates, or indeed to an appearance of two aspirates in the same word, and of the transpositions occasioned by this taste, we have already spoken. Of the other changes which fall under the head of dissimilation it is scarcely worth while to speak, for they seem incapable of a reduction to rules and systems; besides, the phenomena are to be collected from so wide a field that the enumeration would far exceed the limits to which these discussions are necessarily confined.

One of the most common changes of dissimilation with which a root may be affected without losing its identity is that called *Metathesis*. The metathesis of vowels takes place most frequently in the case of liquids, because it is a matter of indifference whether a vowel is placed before or after them. Instances of this change meet us constantly in every language. Thus in English we have *bird*, *brid*; *third*, *thridde*; *brothel*, *bordel*; *burst*, *brust*; *board*, *broad*; &c. (*Diversions of Purley*, II. p. 83, foll.). In Greek ἔθανον, θνήσκω; καρδία, κραδία; ῥέζειν, ἔργον; ἔμολον, βλώσκω, and even in the same word ἐγρ-ήγορα (*Journal of*

Education, V. p. 305). And so also in comparisons of different languages, as English *horse*, German *Ross*, French *roussin*; English *fright*, German *Furcht* for *Vor-acht*; English *folk*, German *Volk*, Latin *volgus*, Greek ὄχλος, Cretan πόλχος, Slavonic *plok*, *polk*, *pluk*; Lithuanian *pulkas* (as we read of a “pulk of cosacks”); old Norse *flockr*, Anglo-Saxon *floc*, English *flock*; &c. Metatheses like ψίν for σφίν; ψάλιον for σπάλιον; *vespa* for σφήξ; φάσγανον for σφάγανον; &c., are analogous to that transposition of the aspirate and semivowels, which we have already stated and explained.

(IV.) The most systematic of the changes which a root undergoes is the modification of its vowel. This is produced by influences similar to those to which we have attributed the assimilation of the consonants, namely, the contact with the prefix and suffix, the greater or less weight of which induces a less or greater weight of the root vowel.

It has been shown in a former chapter that there are properly speaking only three distinct vowels: *a* or the common sound by which all consonants are articulated; *i* and *u* the ultimate state, the former of the gutturals and dentals, and the latter of the labials. The vowels *o* and *e* differ from *a* in weight only.

The Greek vowels *α*, *ι*, *υ*, as opposed to one another, in most cases correspond to the three original Sanscrit vowels *ā*, *i*, *ū*, and there is seldom, if ever, any interchange or confusion between the different vowels of the two sets; whereas the two Greek vowels *ε*, *ο*, very often share with *α* in the representation of the Sanscrit *ā*, *ε* being the most common substitution for it, *ο* the next, and *α* the least usual. Of these three representatives of the Indian short vowel, the heaviest is *α*, the lightest *ε*, and *ο* stands between them. As the Indian *α* is the mere articulation of the different consonants which form the Sanscrit syllabarium, and is therefore the shortest possible, it is of course obvious why the lightest of the Greek vowels stands in its place. Of the three distinct vowels *α*, *ι*, *υ*, it is clear that *ι* is lighter than *α* though it is heavier than *ε*. This appears from the fact pointed out by Bopp (*Vergl. Gramm.* p. 5) that in secondary formations in Latin the radical *α* is changed into *i* in syllables terminating with a vowel, and into *e* when the syllable is followed by two consonants, or the consonant which follows is deprived of its

vowel and thrown back upon the root vowel as in the following instances adduced by Bopp (*l. c.*) and Rosen (*Journal of Education*, VIII. p. 344¹).

A.	I.	E.
<i>apiscor,</i>	<i>adipiscor,</i>	<i>adeptus,</i>
<i>aptus,</i>		
<i>amicus,</i>	<i>inimicus,</i>	
<i>arma,</i>		<i>inermis,</i>
<i>barba,</i>		<i>imberbis,</i>
<i>caput,</i>	<i>occiput,</i>	<i>biceps,</i>
	<i>sinciput,</i>	<i>præceps,</i>
	<i>principium,</i>	<i>princeps,</i>
<i>cado,</i>	<i>cecidi,</i>	
	<i>stillicidium,</i>	
<i>cano,</i>	<i>cecini,</i>	<i>concentus,</i>
<i>fallo,</i>		<i>fefelli,</i>
<i>jacio,</i>	<i>abjicio,</i>	<i>abjectus,</i>
<i>tuba, cano,</i>	<i>tubicinis,</i>	<i>tubicen.</i>

Now it is quite clear that in all these cases the *i* is introduced into a heavier form than the *a*, and the *e* than the *i*, consequently *i* is heavier than *e* and lighter than *a*. The same would appear from an examination of the Sanscrit and Greek. A similar analogy shows that *u* is heavier than *i*. Compare *maximus*, *pontifex*, &c., with the older forms *maxumus*, *pontufex*, &c., of which they are euphonic variations: also *Castorus*, *nominus* with *Castoris*, *nominis*, and the first persons plural in *-imus* with old forms *sumus*, *volumus*, and the Greek *-ομεν* = *ομες* (Lepsius *Paläographie* p. 53). Another proof of the greater weight of *u* in Greek may be derived from the fact that in the weakest forms of words containing labials, whether the labial is vocalized into *u* or not, we find *ι* as the last faint trace of the original form: compare *φύω*, *υῖός*, *φίω*, *filius*; *ἔρα*, *Ἔρι*, *ἔρ*; *γραμμα-τεύς*, *γραμμα-τίζω*; *σῦς*, *σίαλος*; *ταχύς*, *τάχιστος*; &c. The Boeotian substitution of *υ* for *οι* shows that *υ* was equal to *ι* and something more. *A fortiori* *u* is also heavier than *e*. With regard to the comparative weight of *u* and *a* it is to be remarked that the Latin

1. Rosen asks "How does it happen that *pario* deviates from the analogy, forming its preterperfect tense *peperi* instead

of *pepiri*?" We answer, because in this word the *r* is thrown back upon the root vowel.

conculco from *calco* is a sufficient proof of the greater weight of *a*, which also appears from the fact that although *a* becomes *e* in the reduplication syllable in Latin, just as *η*, *ω*, become *ι* in Greek, *o* and *u* are considered so light in Latin and Sanscrit that they remained unchanged in preterite reduplications in the former (*cucurri*, *momordi*, *pupugi*, *tutudi*) and in desideratives in the latter as in *yuyuts* “to desire to fight” from *yudh*. So in Gothic we have in the plural or heavier form *hulpum* “we helped,” but *halp* “I helped.” The same also appears from the change of *-thas*, *-tas*, the ordinary dual endings in Sanscrit, to *-thus*, *-tus* in the longer and heavier form of the preterite (see Bopp *Vocalismus* p. 227). It also appears to be lighter than *o* to judge from changes like *colere*, *cultus*; *columen*, *culmen*; &c. There are in Latin some cases in which *u* appears as lighter than *i* and *e*, as in *difficultas*, from *difficilis*, *sepultus* from *sepelio*, &c. In these instances we must presume that the *u* had a very different sound from that which it bears as a heavy vowel, perhaps the sound of the French *u* or the German *ü*. Consequently, the short vowels in Greek stand in the following order in regard to comparative weight.

a, *o*, *υ*, *ι*, *ε*.

Besides the euphonical change produced by substituting a lighter for a heavier vowel in a heavier form, there are three other vowel changes of very frequent occurrence and which we may term adscititious vocalization.

(α) The first is that which the Sanscrit Grammarians call *guna* and *vridhhi*; *guna* or “corroboration” takes place when *ā* is put before either of the four last of the simple vowels *ī*, *ū*, *ṛ*, *ṛ̥*; *vridhhi* or “increment” when *ā* is placed before one of these vowels after it has been *guna*’d; thus

	<i>ē</i> ,	<i>ū</i> ,	<i>ṛ</i> ,	<i>ṛ̥</i> ,
<i>guna</i>	<i>é</i> ,	<i>ó</i> ,	<i>ar</i> ,	<i>al</i> ,
<i>vridhhi</i>	<i>ai</i> ,	<i>au</i> ,	<i>ār</i> ,	<i>āl</i> .

That the conversion of the vowels *ṛ*, *ṛ̥* into the syllables *ar* and *al* is a *guna*, appears from the fact that *é*, *ó* became *ay*, *av* before vowels. This insertion of a new vowel into the root is not in itself significant; it is purely dynamical, takes

place in verbal roots only, and, like reduplication, &c., is designed to give that extension to the root which is necessary to adapt it for the expression of duration. In Greek the *guna* is never effected by α , but by ϵ in the heavier, and $\omicron$ in the lighter forms. Bopp has rightly remarked (*Vocalismus*, p. 193 foll.) that the Greek $\alpha\nu$ corresponds to a *vridhhi*, not to a *guna* of the ν , and that although $\alpha\iota$ does sometimes stand for the Sanscrit $\acute{e} = \check{a}i$, it never does so in cases where $\acute{e}$ is a *guna* of i , with the exception perhaps of $\alpha\acute{\iota}\theta\omega$. At the same time he is not correct in stating that whereas $\epsilon\iota$ and $\omicron\iota$ are both *gunas* of ι , the only allowable *guna* of ν is $\epsilon\nu$, for $\sigma\pi\omicron\upsilon\delta\acute{\eta}$ is a *guna* as well as $\sigma\pi\epsilon\acute{\upsilon}\delta\omega$, and $\acute{\alpha}\kappa\omicron\lambda\omicron\upsilon\theta\omicron\varsigma$ as well as $\kappa\acute{\epsilon}\lambda\epsilon\upsilon\theta\omicron\varsigma$. The greater weight of the vowel ν is the reason why the lighter vowel ϵ is preferred in the *guna* of ν .

(β) The second of the changes to which we allude must be carefully distinguished from *guna*. This is when ι or ν is subjoined to the α or ϵ of the root, so as to make an apparent *guna*, as, for instance, when we have $\nu\acute{\epsilon}\alpha\text{-}\iota\text{-}\rho\alpha$ by the side of $\nu\epsilon\alpha\rho\acute{\alpha}$ or $\acute{\epsilon}\lambda\alpha\text{-}\acute{\upsilon}\nu\text{-}\omega$ by the side of $\acute{\epsilon}\lambda\acute{\alpha}\text{-}\sigma\alpha\iota$. In this case the intruder is the second, not the first vowel of the diphthong, and as this phenomenon takes place in liquids only, we may conclude that it is due to the nature of the liquid which admits a vowel indifferently before or after it. The doubling of liquids to which we have already referred is a phenomenon of the same kind.

(γ) It seems not unreasonable, after what Lepsius has said (*Paläographie*, p. 73 foll.), to consider the *anusvāra*, or nasal insertion, as a part of vocalization. The name *anusvāra* or “after-vowel” shows that it is reckoned among vowels by the Sanscrit grammarians, and, like the vowel $\bar{r}$, it is capable of *guna*. In the conjugations it serves very much the same purpose as *guna*, and we find the same root strengthened by *guna* in one language, and by *anusvāra* in another. Thus, to take the instances given by Lepsius (p. 79), we have from the Sanscrit *chid*, Latin *scid*, *chi-na-dmi* and *sci-n-do* by *anusvāra*, whereas the Gothic makes *sk-a-ida* by *guna*, and if $\alpha\text{-}\acute{\iota}\theta\omega$ is a *guna*’d form, we may compare it with the Sanscrit *anusvāra*-form *i-ñ-dh*. The Latin is most partial to *anusvāra*, the Gothic least so, as will be seen from the following instances:

Sanscrit.	Greek.	Latin.	Gothic.
(root <i>lika</i>) <i>lékmi</i> ,	(root λιχ) <i>λείχω</i> ,	<i>lingo</i> ,	
	(λιπ) <i>λείπω</i> ,	<i>linquo</i> ,	
(<i>str</i>) <i>strnómi</i> ,	(στορ) <i>στόρνυμι</i> ,	<i>sterno</i> ,	<i>strauja</i> .
(<i>tuda</i>) <i>tudâmi</i> ,		<i>tundo</i> ,	<i>stauta</i> .
(<i>uda</i>),	<i>ὔδωρ</i> ,	<i>unda</i> ,	<i>vatô</i> .

The vowel of the *guna* is softened into *i* in Gothic, a fact which was first pointed out by Bopp, and to which we shall return when we come to a discussion of the verb conjugation. We may compare with it the insertion of *j* before vowels in the Slavonic languages, sometimes instead of *guna* as in *vjemj* (Sanscrit *védmi*); sometimes as an arbitrary insertion; compare *jesmj* with the Sanscrit *asmi*. Of this latter insertion we have some remarkable instances in Æolic Greek. Thus, in a Boeotian Inscription (Böckh, No. 1564, l. 1) we have *τιούχαν ἀγάθαν* for *τύχην ἀγαθήν*: in a Delphian Inscription (Böckh, No. 1688, l. 11) *μηδὲ δῶρα δεξιάσθω* for *δεξάσθω*; and in the Fragment of Corinna quoted above (p. 162), we have *Πινδαρίοιο* for *Πινδάροιο*.

Before we quit this subject, it will be proper to make a few remarks on the significance of roots, a subject on which some very gratuitous assumptions have been made. Roots being the centers around which the words of a language are grouped, the elements from which the noun and verb develop themselves, the points of convergence from which they spread themselves out with infinite ramifications, it is unnecessary to suppose that they should all have a distinct meaning when taken by themselves. The fact is, that most of them obtain a significance recognizable by the understanding only when combined with those terminations and flexion forms which make them into words, and in these words they must be examined if we would know them.

The root of a word points to the conception, to the selection of some particular quality of the object which makes most impression upon us, and by which we classify it with the other objects, possessing or appearing to possess the same quality. Why particular combinations of letters should be chosen for the expression of certain qualities, is a mystery which cannot be explained. It has been hinted that the three primary positions in

space were indicated by the three first consonant-articulations, namely, the three tenues, and that these constitute the three fundamental pronouns. Farther than this we cannot go. It appears that certain of these pronominal stems, or modifications of them, have become verbal roots; thus, we have from the first *μά-ω*, *μέ-νω*, *πείρω*, *περάω*; from the second in its two forms *Fa* and *ta-va*, we have *σεύω*, *θοός*, *τί-θη-μι*, *κείμαι*, *δέω*, *δύω*, &c.; all of which preserve the meaning of the pronominal words with which they are connected. We shall see too, that *Φάραξ* is only the preposition *ἀ-νά*, with a suffix, and that there might be some reason for selecting the particular syllables which express the relations of father and mother. But, generally speaking, the choice is either arbitrary, or depends upon principles of which it would be idle to seek an explanation.

In considering the roots of words, we must be careful to distinguish them according to the metaphysical or historical differences of the same root. A metaphysical difference between two roots etymologically equivalent, is when they express two ideas connected by the relation, not of resemblance, but of contrast: an historical difference is when, with the same meaning, they have suffered those systematic changes, which time and use are continually producing upon the consonants of a language as long as it is spoken. It will be recollected that both these differences are daily taking place; for every man uses every word of his own language according to his own mode of thinking or habits of life, and the pronunciation of words is also subject to continual variation. And thus, many of our English vulgarisms are merely examples of changes, which take place so regularly in certain languages, that they may almost be reduced under general rules: for instance, the addition of a dental as in *gown-d* for *gown*, *varmin-t* for *vermin* is the same variation that appears in *hun-d* compared with *canis*, *tyran-t* compared with *tyrannus*, &c.

When we wish to dissect a word in order to arrive at its primary element or root, our first object is to inquire with what other words it agrees in termination or prefix. The latter is stript off at once, but the removal of the affix is often a double operation. To take that set of words called nouns, with which we are in the present part of this work more immediately concerned, we find every one ends with a short termination,

often a single letter, which marks its immediate relation to the other objects in connexion with it, and which we call the *case-ending*. But, in the majority of cases, we find between this and the root, an affix consisting of one or more pronominal stems, which marks the definite class and quality of the noun, and points out the restriction with which the general force of the root is applied in the particular instance. When the case-ending alone is removed, the remaining part of the word is called its *crude-form*, whether it has another pronominal affix or not. In most cases the crude form must be still farther denuded before we can arrive at the root or skeleton of the word. Accordingly, in the following analysis of the noun, we have first considered the case-endings or absolute terminations of the noun, and have then examined those pronominal insertions before the case-ending, which may be considered as the terminations, not of the noun, but of its crude form. The young student will thus more clearly discern by what successive steps he must proceed in dissecting any given noun, in order to arrive at a definite conception of its meaning.

CHAPTER II.

THE CASE-ENDINGS OF THE NOUN.

WHEN we say that a noun is the name of a thing, we mean that it is a word by which we express our conception of it; now the conception of a natural object is the recollection of the most prominent quality or attribute which we have perceived in it; the name, therefore, points out or refers to this quality or attribute. We have shown in the last chapter that the part of a noun which conveys its meaning to our ear, and which is called its stem or root, never appears by itself in those languages which have inflexions; even the crude form never appears alone, except when it stands as the vocative case. To the crude-form, in all other instances, is affixed a termination, which constitutes it a word, and gives it the signification of a noun; for the same root, with a different termination, and perhaps slightly modified, might be a verb. These endings, which make the crude form into a noun, and which we call the case-endings, it is now our business to discuss separately and in detail.

We have before adduced reasons for the opinion, that the accusative or objective case is the primitive form of the pronouns; the same we believe holds with regard to the nouns; if the primary expression of self is objective, much more so must be that of any object in the external world. In analyzing the cases, therefore, we shall consider the accusative or general objective case first; the others we shall discuss in the order in which they are placed in Sanscrit, which has the fewest prepositions, and therefore the most complete case-system of any of the languages with which we are concerned.

In Sanscrit there are three genders; masculine, feminine, and neuter; three numbers; singular, dual, and plural; and eight cases; nominative, accusative, implementive or instrumental, dative, ablative, genitive or possessive, locative, and vocative.

Of the feminine and neuter genders as distinguished from the masculine, Bopp says rather quaintly (*Vergl. Gramm.* p. 135),

“In Sanscrit the feminine, as well in the stem as in the case-endings, loves a luxuriant fullness of form, and where it is distinguished in the stem or in the ending from the other genders, it is marked by broader, more sounding vowels. The neuter on the contrary, loves the utmost brevity, but is distinguished from the masculine, not in the stem, but only in the most prominent cases, in the nominative and in its perfect opposite, the accusative, also in the vocative, where this is the same as the nominative.” The fact is, that, in masculine and neuter nouns, the vowel terminating the crude form, and to which the case-ending is attached, is generally and properly short; while in feminine nouns, the vowel is long. There are exceptions to this rule, more frequently however in Greek than in Sanscrit. Thus, instead of the *o* which stands for the Sanscrit masculine *ā* in *λόγ-o-s*, &c., we have a long *a* or *η* in *παιδο-τρίβ-η-s*, &c., and in the numerous class of nouns ending in *-της*. Though the appearance of the genitive in *-ου* and the analogy of *in-col-ā*, &c., might lead us at first sight to conclude that these words belong to the same class with those of the second declension as it is commonly called, yet, on further investigation, it seems difficult to conceive an accidental insertion of such a strong and heavy vowel as *η*, which is in almost all cases the representative of some lost or absorbed element. Besides, it is not by any means unusual to find in the oblique cases, a shorter form than in the nominative: thus, from the terminations *-τήρ*, *-τωρ*, which, we shall see, are only extensions of *της*, we have the genitives *μήτρος*, *ἀμήτορος*, &c. In our opinion the *η* here, as elsewhere, includes the lost *y*, which is used to form derivative verbs, and which seems by no means out of place in words expressing an action, as the nouns in *-ης* and *της* invariably do: and thus *παιδοτρίβ-ης* *ἐνέργε-της* are equivalent to *παιδοπρίβ-yas*, *ἐνέργε-tyas*, just as the corresponding verbs would be *παιδοτριβέω* (*παιδοτριβῶ*) *ἐνργετέω* (*ἐνργέtyω*). Such an addition of the second pronominal element to the third, appears more clearly, and throughout the cases in the feminine forms of nouns in *της*; compare *προδό-της*, *προδό-τις* (*-τιδ-s*); *ικέ-της*, *ικέ-τις* (*-τιδ-s*) &c. Bopp’s remarks (*Vergl. Gramm.* p. 139) on the long *î* which appears most frequently in Sanscrit as the characteristic addition for the formation of stems of the feminine genders deserve insertion here. “In Greek and Latin this feminine long *î* has

become unfit for declension, and where it has still left any traces, a later, unorganic addition has become the vehicle for the case-endings. In Greek this addition is either *a* or *δ*; in Latin it is *c*. Thus e.g. ἡδεῖα answers to the Sanscrit *svādū-ê* from *svādu* 'sweat'; -τρια, -τριδ, e.g. in ὀρχήστρια, ληστρίς, ληστρίδ-ος, answer to the Sanscrit -त्री, e.g. in *janitrî*, 'she who brings forth,' to which the Latin *genitrî-c-s*, *genitrî-cis* answers, while in the Greek γενέτειρα and similar formations, the old feminine *ι* is pushed back a syllable. This analogy is followed by μέλαινα, τάλαινα, τέρεινα, and substantive derivations like τέκταινα, Λάκαινα. In θεράπεινα, λείαινα, the stem of the primitive is mutilated by the loss of a *τ*, as is also the case with the nominative masculine. In θέαινα, λύκαινα, we must assume, either that the proper primitive in *ν*, or *ντ*, is lost, or that these are forms of a different kind, and agree with *indrânî*, 'the wife of Indra,' a word which stands nearly alone in Sanscrit. The cases where the feminine *î* is superseded by *a* only, are confined to feminine derivations from forms in *ντ*, in which the *τ* is changed into *σ*, and the preceding *ν* is represented by *υ* or *ι* or a mere lengthening of the preceding vowel or assimilated to the *σ*;

thus, ουσ-α, εισ-α, εσσ-α, âσ-α, (Dor. αισ-α), ūσ-α,
for οντ-α, εντ-α, εντ-α, αντ-α, υντ-α.

To this class we must also refer feminine substantives like θάλασσα, βασίλισσα, μέλισσα, which J. Grimm (II. 328), as I think very rightly, compares with forms like χαρί-εσσα, μελιτό-εσσα, and explains the doubled *σ* by gemination or assimilation. These formations of the feminine by a simple *a* instead of the original *ι* are the more corrupt, and relatively the youngest; the Greek too is not supported here by any of the cognate languages." In confirmation of this hypothesis about the change of place of the feminine *ι*, Bopp might have mentioned the similar change which has taken place in the verb-forms τύπτεις for τύπτεισι, &c., and also in other words; compare ἐξαίφνης with ἐξαπίνης. We think, too, that we have sufficiently shown above (p. 291) that the feminine *ι* is really contained in the assimilated endings of the last mentioned class of feminines. That the *δ* or *c* of the Greek and Latin feminines is not unorganic will appear in the next chapter. If it be inquired what is the reason

why so many inanimate objects are called by names which are considered masculine or feminine, it will be sufficient to answer, that this may have arisen partly from the idea of comparative strength or weakness (Hermann *de Emend. rat. Gr. Gr.* p. 125), partly also from association, for if one word of a class be considered as feminine, all other words of a similar signification would be so considered likewise. For a great many words the gender depends upon something included in the idea of the word; a tree in reference to its branches, and most collective words would be feminine, from the included idea of *mother* (comp. Buttmann *Ausführl. Sprl.* § 32, *Anm.* 3). It is for this reason we conceive that ἡ ἵππος, signifies “a body of cavalry” (Thucyd. I.), ἡ βοῦς “a herd of oxen” (Thom. Mag. *in v.*), and ἡ κάμηλος “a troop of camels” (Herod. I. 80).

We have remarked that the Sanscrit nouns are inflected in the dual as well as in the singular and plural numbers; the same is the case with the Greek, and, to a certain extent, with the Gothic. There is every reason to believe that, in Greek at least, this dual is nothing but an older form of the plural, restricted in the newer and more refined speech to the expression of two instead of more; for, first, in many of the pronouns we find the oldest forms of the root in the dual number; secondly, we find in Homer, and indeed in later writers, this dual form used as a plural; lastly, we have the analogy of our own and other languages in support of the opinion that of two forms of the same word, the older may be confined to vulgar use as a plural, while in the more polished language it is restricted to the number two (comp. Buttmann, *Ausführl. Sprl.* § 33, *Anm.* 1; *Penny Cyclop.* article *Dual Number*). Besides, it appears that some old grammarians considered the forms *dixere*, &c. for *dixerunt*, &c. as duals (Quintil. I. 5, § 42), though Cicero (*Orator.* c. 47) admitted them as allowable, though antiquated, forms of the plural.

As we are about to base our inquiry into the Greek cases upon the more complete case-system of the Sanscrit language, we may introduce the subject by laying before our readers an example of the declension of some simple and regular noun in that language. The name of the divinity, *çiva*, is thus declined.

	Sing.	Dual.	Plur.
1. Nominative,	çivas,	çivau,	çivâs.
2. Accusative,	çivam,	do.	çivân.
3. Implementive, or instrumental ¹ ,	çivéna,	çivâbhyâm	çivais.
4. Dative,	çivâya,	do.	çivébhyas.
5. Ablative,	çivât,	do.	do.
6. Genitive,	çivasya,	çivayós,	çivânâm.
7. Locative,	çivé,	do.	çivéshu.
8. Vocative,	çiva,	çivau,	çivâs.

It is not necessary to remind the student of Sanscrit that every final *s* in this scheme is changed by *visargah* into *h*, and every *m* by *anusvârah* into the nasal *ñ*.

The crude form of the word which we have taken as an example is *çiva*, which ends in short *a*. Separating this from its affixes, we have the following scheme of case-endings for a noun the crude form of which is terminated by *ă*.

	Sing.	Dual.	Plur.
1.	-s,	-ô = <i>ăŭ</i> ,	-as.
2.	-m,	do.	-an.
3.	-ina,	-bhyâm,	-is.
4.	-a-ya,	do.	-bhyas.
5.	-a-t,	do.	do.
6.	-sya,	-yós,	-anâm.
7.	-i,	do.	-ishu.
8.	crude form,	-u,	-as.

It will be remembered that this is only one of many forms of declension in Sanscrit, and that even this form differs when applied to feminine or neuter nouns. In most of the other declensions the instrumental and dative very nearly resemble one another: thus, the dative of *dharâ* (earth), is *darâyâi*, and the instrumental *darayâ*; the dative of *prîtis* (love), is *prîtayê*, the implementive is *prityâ*, and so forth. To this we shall recur hereafter. The general form of the cases in other than the

1. Wilkins calls this case the *implementive*; Bopp and other Germans term it

the *instrumental*. We have mentioned both, but we much prefer the latter designation.

short *a* declension may be derived from the following paradigm (vide Bopp, *Grammatica Sanscrita*, p. 85, or *Kritische Grammatik*, p. 82):

	Singular.	Dual.	Plural.
Nom.	<i>s</i> masc.fem. <i>m</i> neut. ¹	<i>au</i> m.f. <i>î</i> n.	<i>as</i> m.f.n. <i>i</i> n.
Acc.	<i>m</i> , <i>am</i> m.f. <i>m</i> n. ¹	<i>au</i> m.f. <i>î</i> n.	<i>s</i> , <i>as</i> m.f. <i>n</i> m. <i>i</i> n.
Instr.	<i>â</i> m.f.n. <i>a</i> m.n. ¹	<i>bhyâm</i> m.f.n.	<i>bhis</i> m.f.n.
Dat.	<i>ê</i> m.f.n. <i>ai</i> f. <i>aya</i> m.n. ¹	<i>bhyâm</i> m.f.n.	<i>bhyas</i> m.f.n.
Abl.	<i>t</i> m.n. ¹ <i>as</i> m.f.n. <i>s</i> m.f. <i>âs</i> f.	<i>bhyâm</i> m.f.n.	<i>bhyas</i> m.f.n.
Gen.	<i>sya</i> m.n. ¹ <i>as</i> m.f.n. <i>s</i> m.f. <i>âs</i> f.	<i>ôs</i> m.f.n.	<i>âm</i> m.f.n.
Loc.	<i>i</i> m.f.n. <i>âm</i> f.	<i>ôs</i> m.f.n.	<i>su</i> m.f.n.

It is customary to divide Greek nouns according to three, and Latin nouns according to five, declensions. The differences which constitute the declensions are differences of root and crude form, not differences of termination. The case-endings must have been originally the same for all nouns; indeed we can observe striking resemblances between them even in the Greek language, as it exists in the writings which have come down to us. For instance, the dative singular and the dative and genitive plural are always distinguished by the same endings, as is generally the accusative singular also. A learned writer remarks (*Journal of Educat.* Vol. v. p. 19), "that at one period of the language, probably prior to any written books that have come down to us, all the Latin and Greek nouns had an incremental syllable in the genitive and oblique cases we consider to be nearly demonstrable." We do not think there are sufficient grounds for this generalization. There is no good reason, so far as we know, for supposing that, in the oldest state of the language, the accusative was ever a longer form than the nominative. If we consider, the Latin and Greek nouns in the oldest forms which we have of them, and extend our observations by analogy to all cases, we shall have the following schemes for the case-endings in Latin and Greek. It will be recollected that we take merely the case-endings, and do not trouble ourselves with the roots or crude forms of particular words.

1. Only in the *â* declension.

LATIN DECLENSION.

	Sing.	Plur.
Nom.	-s,	-es,
Accus.	-m,	-es,
Dat.	-i or -bi,	-bus or bos,
Abl.	-d,	-bus,
Gen.	-is,	-(r)um,
Locat,	-i,	-bus.

EXAMPLE.

<i>navě-s,</i>	<i>navě-es,</i>
<i>navě-m,</i>	<i>navě-es,</i>
<i>navě-i or navě-bi,</i>	<i>navě-bos,</i>
<i>nave-d,</i>	<i>navě-bos,</i>
<i>navě-is,</i>	<i>navě-(r)-um,</i>
<i>navě-i,</i>	<i>navě-bos.</i>

GREEK DECLENSION.

	Sing.	Dual.	Plur.
Nom.	-s,	-ε(s),	-ες,
Accus.	-ν,		-ας,
Dat.	-ι or -φι,	-ιν,	-σι or σιν,
Ablat.	-s (for δ or τ),		
Gen.	-ος -ιο, -αο, -θεν,		-άων.
Locat.	-θι.		

As a simple instance of the application of this scheme we will take the pronoun *αὐτός*, which admits of the following inflexions, although we do not mean to say that they are all found in that particular word.

<i>αὐτό-ς,</i>	}	<i>αὐτό-ε(s),</i>	<i>αὐτό-(^ες ι</i>),
<i>αὐτό-ν,</i>			<i>αὐτ(^ο-ας ούς</i>),
<i>αὐτ(^ο-ι ῶ</i>) or <i>αὐτό-φι,</i>	}	<i>αὐτό-ιν,</i>	<i>αὐτ(^ο(ι)-σι(ν))</i>
<i>αὐτῶς (for αὐτόδ-, or</i>			<i>αὐτ(^οισιν</i>)
<i>αὐτόθεν),</i>			
<i>αὐτό-ος αὐτό-ιο,</i>			
<i>(αὐτ-ά-ο) αὐτό-θεν,</i>			
<i>αὐτό-θι,</i>			<i>αὐτο-(ά)ων.</i>

We shall now discuss in detail all the cases of the Sanscrit declension, comparing them with the corresponding Greek and Latin cases, and pointing out what are the substitutions in these two languages for those Sanscrit cases which they have not.

(1) ACCUSATIVE.

The proper sign of this case is *m* in Sanscrit and Latin, and *ν* in Greek. It is well known that the laws of Euphony which prevail in the Greek language, do not permit the appearance of any labial at the end of a word. It would be of little use to inquire into the reasons for this law. We can never learn them till we know what was the old pronunciation of the Greek language. The Sanscrit *m* of the accusative is generally transformed by *anusvârah* into a nasal *ñ*; it is at least possible that the Greek final *ν* may have had the same sound, just as it is turned into a *μ* in certain cases, and into a guttural or sibilant in others. Some such view is also necessary to explain the fact that the Latin final *m* is disregarded in prosody, and the vowel preceding it elided, when the following word begins with a vowel. Indeed Quintilian distinctly explains the *ecthipsis* as a kind of *anusvârah*. He says (*Inst. Orator.* IX. 4. § 39), *Inde BELLIGERARE, PO' MERIDIEM: et illa Censorii Catonis DIEE HANC, æque M litera in E mollita: quæ in veteribus libris reperta mutare imperiti solent: et, dum librariorum insectari volunt inscientiam, suam confitentur. Atqui eadem illa litera, quoties ultima est et vocalem verbi sequentis ita contingit, ut in eam transire possit, etiamsi scribitur, tamen parum exprimitur: ut, MULTUM ILLE, et, QUANTUM ERAT: adeo ut pæne cujusdam novæ literæ sonum reddat. Neque enim exprimitur, sed obscuratur, et tantum aliqua inter duas vocales velut nota est, ne ipsæ coëant.*

In Latin, Greek, and Sanscrit the nominative and accusative of neuter nouns have the same termination. There can be little doubt that the true explanation of this phenomenon is that given by the late Mr Coleridge, especially in its connexion with the fact that in Greek the neuter plural is generally followed by a singular verb. "The neuter plural governing, as they call it, a verb, is one of the many instances in Greek of the inward and metaphysic grammar resisting successfully the tyranny of

formal grammar. In truth, there may be *Multitude* in things; but there can only be *Plurality* in persons. Observe also that, in fact, a neuter noun in Greek has no real nominative case, though it has a formal one, that is to say, the same word with the accusative. The reason is—a *thing* has no subjectivity, or nominative case: it exists only as an object in the accusative or oblique case" (*Table Talk*, vol. II. p. 61, 2). It would perhaps have been better to say at once that both these facts depend upon the same principle, that there is, namely, no nominative case of neuter nouns, either in the singular or in the plural. The reason of this we shall see better when we come to explain the meaning of the termination of the nominative.

It is difficult to resist the impression that there must be some connexion between this accusative *-m*, *-ν*, and the old locative ending *-n*. It is clear, as we have before shown, that this locative ending becomes *-m* in the Latin words *interim*, *enim*, *iam*, *et-iam*, &c., though in other Latin words the *-n* is retained e. g. *in*, *quin*, *in-de*, *pro-in*, &c. In Greek the adverbs *δίκην*, *ἄκην*, &c. are clearly locatives in meaning, though in form they are perfectly analogous to accusatives. We may also compare the accusatives *μίν*, *νίν*, with the recognized datives *ἐμίν*, *τίν*, *σφίν*, &c. Moreover, it is well known that in a multitude of instances the meaning of the Greek accusative is entirely locative; e. g. when it is found along with a neuter or passive verb. We find other examples of an interchange of case-endings in the use of *-d* as the sign of the neuter accusative-nominative in *id*, *istud*, and the appearances of a similar ending in *ὅτ-τι*, &c. (Bopp *Vergl. Gramm.* p. 183), whereas the *-d* is the proper termination of the ablative in Latin, and also, as we shall show, in Greek. The *ς* which the Greeks sometimes substituted for this *δ* is also used sometimes as a mark of the genitive case, because the significations of that case frequently enter into those of the ablative. But all this is very intelligible. It depends upon the nature of the noun, whether you shall use a dative, genitive, or accusative case-ending in expressing a given relation of the noun. In some instances a locative would be the right case to use in expressing general relation, in others a dative, in others even an ablative. But there is, properly speaking, no mere accusative; objectivity and location are identical; only the former is the expression of general, the latter of particular position.

If we speak of a thing as an object, it is the *there*, though the particular location may not be defined. We conclude, then, that the sign of the accusative case in Greek, Latin, and Sanscrit is the oldest form of the locative, assigned to express general objectivity, its use as a particular locative being retained only in certain pronouns, and its place being supplied in other words by the termination *i* when a particular position was to be described. This ending *-i*, as is generally the case when this vowel appears, is a mutilation of the element of the second pronoun, and is represented in its fuller form by ϕi . It has probably lost the final ν also, as we see in those Greek words which exhibit the accusative-ending as a mere *-a*, as $\acute{\alpha}\nu\delta\rho\alpha$ for $\acute{\alpha}\nu\delta\rho\alpha-\nu$, &c. We have instances in the Greek verbs likewise of the suppression of a ν or the substitution of an *a* for it, as in the optative third pers. ending *-οιατο* for *-οιντο*. We may also compare $\pi\rho\acute{o}\sigma-\theta\epsilon$, $\pi\rho\acute{o}\sigma-\theta\epsilon\nu$; $\pi\acute{\alpha}\lambda i$, $\pi\acute{\alpha}\lambda i\nu$; $\pi\acute{\epsilon}\rho a$, $\pi\acute{\epsilon}\rho a\nu$; &c.

With regard to the accusative plural we adopt without hesitation Grimm's opinion, that it is merely the accusative singular with the plural *s* superadded. The stems which end with a short vowel in Sanscrit form the accusative plural in *n*, with a lengthening of the final vowel of the stem: thus *vrīkās* "a wolf," makes accus. plur. *vrīkân*. If we compare this word with the Gothic *vulfans* on the one hand, and the Latin *lupōs* on the other, we shall perceive that the Gothic is the complete form, the Sanscrit and Latin having lost, one the *s*, the other the *n*, and both having supplied the loss by strengthening the final vowel of the crude form. If we now take the Greek $\lambda\acute{\upsilon}\kappa o\nu s$, which bears the same relation to $\lambda\acute{\upsilon}\kappa o\nu s$ that $\acute{o}\delta o\nu s$ does to *dens*, &c., it will appear, we conceive, that the same holds in Greek. We may add that $\tau\acute{\upsilon}\pi\tau\omega\nu$ for $\tau\acute{\upsilon}\pi\tau o\nu(\tau)s$ is analogous to *vrīkân* for *vrīkans*. It will be observed, too, that in those cases where the accusative singular has lost its final *m*, *n*, and indeed in some others, the plural *s* is merely subjoined to the weakened form of the accusative singular; thus $\tau\acute{\upsilon}\pi\tau o\nu\tau a^{(\mu)}$ makes $\tau\acute{\upsilon}\pi\tau o\nu\tau\check{a}-s$.

In neuter nouns the accusative and nominative plural, which are, for the reasons above given, the same, always end in *-a* in Zend and the old European languages of the family; but in Sanscrit we find an *i*, which is probably only a weakened form of an original *a* (Bopp, *Vergl. Gramm.* pp. 5 and 269); the final vowel of the crude form is lengthened, and an euphonical

n inserted between it and the case-ending *i*. Thus *mādhū* (μέθυ) “honey”, makes in the plural *mādhū-n-i* instead of μέθυ-α.

We have before stated that the dual is merely a by-form of the plural; the nominative and accusative dual in Sanscrit are, as in Greek, the same. In some neuter nouns the dual nom. accus. are the same as the plural; in others we see a nearer approximation to the Greek neuter plural than the Sanscrit neuter plural presents, an omission, namely, of the euphonic *n*. Thus *dāna* “a gift,” makes in the dual *dānē=dāna-i*, the plural being *dānā-n-i*; *vāchās* speech makes in the dual *vāchās-î*, the plural being *vachāns-i*. We see the proper explanation of these forms in the Latin neuter plurals *quæ*, *hæ-c(e)=qua-i*, *hai-ce*. The former is identical with the Sanscrit dual *kê=ka-i*, and it differs by the insertion of the *n* and lengthening of the root-vowel from the Sanscrit plural *kā-n-i*. Bopp properly remarks (*Vergl. Gramm.* p. 270) that also the second person plural of the Latin verb is more like the Greek and Sanscrit dual, than the plural of the same person.

(2) NOMINATIVE.

The proper sign of the nominative case is *s*. In Sanscrit this sibilant is usually softened by *visargah* into *h*. In Greek and Sanscrit it is often absorbed in an *â*-ending in feminine nouns; in Latin and Zend it is frequently dropped altogether in this case. When we recollect how frequently the final *s* is mute in modern French, we shall not wonder at these appearances of a similar insignificance of the same letter in the ancient languages. We find instances in old Latin of *s* concluding a short syllable though the succeeding word begins with a consonant, as in the *senio confectūs quiescit* of Ennius, which can only be explained by supposing a *visargah* of the nominative analogous to the *anusvārah* of which we have spoken above. There are reasons for supposing that this was the case in Greek also. Thus we do not believe that the rule about the pause is violated in Æschylus (*Persæ* 321), as Porson thinks (*Suppl. ad Præf. Hec.* p. 33); we can easily imagine that Ἀριόμαρδος Σάρδεσι might be pronounced Ἀριόμαρδο Σάρδεσι. As to the objection that Ariomardus was a governor of Thebes and not of Sardis, we might as well object to Æschylus for saying in v. 301, that Arcteus was πηγαῖς Νείλου γειτονῶν Αἰγυπτίου, for the same Arcteus,

by an amusing conversion, is called in v. 41 a governor of Lydia, ἀβροδιαίτων δ' ἔπεται Λυδῶν ὄχλος—τοὺς Μιτρ. Ἀρκτεὺς τ' ἀγαθός—ἐξορμῶσιν. Quintilian, too, seems to have thought that the chief reason for the *visargah* in old Latin was to avoid a concourse of consonants similar to that in this passage of Æschylus. He says (*Inst. Orator.* IX. 4 § 37) *Ceterum consonantes quoque, earumque præcipue, quæ sunt asperiores, in commissura verborum rixantur, ut X ultima cum S proxima, quarum tristior etiam, si binæ collidantur, stridor est: ut ARS STUDIORUM. Quæ fuit causa et Servio (ut dixi) subtrahendæ S literæ, quoties ultima esset aliaque consonante susciperetur, quod reprehendit Lauranius, Messala defendit. Nam neque Lucilium putant uti eadem ultima, quum dicit, SERENUS FUIT, et DIGNUS LOCOQUE, et Cicero in Oratore (c. XLVIII) plures antiquorum tradit sic locutos* (We have here adopted the emendations of Rollin and Gesner; the books have *et S ultima cum X proxima*, which is nonsense). If this view is well founded, we shall not wonder that a final letter, of little force in pronunciation, should in some cases be dropped in writing also. Such we find to be the fact in the feminine nouns of the first declension (where the final *s* is absorbed by the length of the final vowel) and in many masculine and feminine nouns of the third or unparasyllabic declension.

The explanation of this nominative-sign is obvious and easy. The simplest form of the third personal pronoun in the Indo-Germanic languages is, we have seen, in Sanscrit *sa-s*, *sâ*, *tad*; in Greek (σ)ο, (σ)η, το; in Goth. *sa*, *sô*, *thata*. It is observed by Bopp (*Abh. Ak. Berl.* 1826, p. 66) that although there is such a great number of crude forms in the Greek language ending in -ο, there is not one which wants the nominative sign *s* except this pronoun. A similar remark applies to the Gothic language. There must be some very good reason for this exception. We remark that, in modern German, when the adjective has an article prefixed it is declined according to a weaker form, in other words, it does not preserve the declension, which it exhibits when not preceded by an article; thus we have *gute-r Wein*, *gute-m Wein*, “good wine,” “to good wine;” but *de-r gute- Wein*, *de-m gute-n Wein*, “the good wine,” “to the good wine;” the case-ending of the articles not being repeated in the adjective. Conversely, we find in Greek that the case-endings are preserved in the noun or adjective but not in the nominative masculine

of the article. Thus we have $\acute{o}(=\sigma o)$ $\acute{\alpha}\gamma\alpha\theta\acute{o}-s$ $\acute{\alpha}\nu\theta\rho\omega\pi o-s$, not $\acute{o}s$ $\acute{\alpha}\gamma\alpha\theta\acute{o}$ $\acute{\alpha}\nu\theta\rho\omega\pi o$. When, however, this pronoun assumes a distinct personality it takes to itself a nominative-ending like another noun; thus $\acute{o}$ $\acute{\alpha}\nu\theta\rho\omega\pi o s$, $\acute{o}s$ $\tau\alpha\upsilon\tau\alpha$ $\pi o i \epsilon \acute{\iota}$, "the man who makes these things" = "the man, he (i. e. this man) makes these things." We have before remarked that in the article it is only the nominative, masculine and feminine, of the demonstrative pronoun which exhibits the form $\acute{o}$, $\acute{\eta}$, or substituting the sibilant for the aspirate, σo , $\sigma \eta$; the other cases present a form beginning with τ , as nominative-accusative neuter τo ; gen. $\tau o\upsilon$, $\tau \eta s$, $\tau o\upsilon$, &c. Whereas in the relative, as it is called, the form beginning with an aspirate is used for all cases of the masculine and feminine genders; now this relative expresses distinct personality or a subject in the masculine and feminine genders (that there is no subject or nominative in neuter we have before seen); but when this pronoun is used merely as a prepositive article, it of course expresses personality or subjectivity only in the nominative case, for in that case only can the name of an *object* be considered as a *subject*; this is the reason why all cases and genders of the article $\acute{o}$, $\acute{\eta}$, except the nom. masc. and fem., assume the objective form in τ -. We have shown before that, of the three fundamental pronouns, the first represents the *here*, the second that which is *near to the here*, the third the mere object; we have also seen how in the idea of nearness the second pronoun includes the relative and reflexive pronouns as opposed to the mere demonstrative, and is also used to form a nominative case to the third pronoun; we now see that this element under the form *sa* represents *subjectivity* as opposed to *objectivity*, and is for that reason used as a sort of post-positive article to note the nominative case.

The plural nominative-ending in Sanscrit is *-as*, which we must be content to explain with Bopp (*Vergl. Gramm.* p. 261), by considering it "as an extension of the singular nominative sign *s*, so that there lies in this extension of the case-suffix a symbolical indication of plurality". For this we generally find the ending *-es* in Greek. In the first and second declension, however, the nominative plural is *-ai* or *-oi*. It is nearly demonstrable that the final *i* in these instances, as well as in Latin, has supplanted an original *s*, as is also true of the Latin genitives of the first declension; thus for *familiæ*, *fa-*

miliai, the common forms, we have also *familiâs* = *familia-is*. We have no hesitation in asserting that *λύκο-ι*, *χώρα-ι*, stand for *λύκο-ες*, *χώρα-ες*, and that the Latin fifth declension in *s* is identical with the first declension in *a* (Bopp, *Vergl. Gramm.* p. 263). As the accusative plural is formed from the accusative singular by adding *s*, we may be justified in supposing that the plural nominative is formed from the singular by the same addition; as a double *s* is not allowed at the end of a word in these languages, we must conclude that the plural *s* was joined to the singular by the intervention of a short *ě* or *ǣ*, so that in all probability the original form of the plural nominative of *ἰχθυ-ς*, for instance, would be *ἰχθυσ-ες*, which is practically shortened into *ἰχθυες*, as *ἐλέγεσσο* is into *ἐλέγεῶ* = *ἐλέγου*, &c. (comp. Bopp, *Vergl. Gramm.* p. 220).

In our own and other modern languages we find *n* as well as *s* the sign of the plural. In the verb-endings in Greek we find the plural *-μεν* instead of *-μες*. We shall discuss this in the proper place.

(3) IMPLEMENTIVE OR INSTRUMENTAL.

(4) DATIVE.

(7) LOCATIVE.

We shall consider all these three cases together, because we believe that their meanings spring from the same source, and because these meanings are all represented by the same case in Greek, that, namely, which we call the Dative.

In Sanscrit the instrumental singular is marked by an ending *â* or *ina*, the latter ending being appropriated to nouns, the crude form of which ends in a short vowel. The termination *â* is justly considered by Bopp (*Abh. Ak. Berl.* 1826, p. 77; *Vergl. Gramm.* p. 188) as the same with the preposition *â*, which is elsewhere used as a prefix, with the signification "on". The pronouns *in*, *iva* have the same meaning, and we consider them identical with the latter instrumental-ending¹. That the idea of an instrument or cause may be included in that of position or containing, is obvious; and that a preposition, the use of which is originally (as indeed is the case with all prepositions) to denote position, can be used as a word marking an instrument or cause, is clear from the usages of *διὰ* and *ὑπὸ* in Greek, and *per* and *ob* in Latin.

1. Above p. 216.

The sign of the dative in Sanscrit is $\acute{e} = ai$ or one of its longer forms $\acute{a}i$ or aya . The termination of the locative singular is in most cases i , so that the dative is only the locative with a *guna* of the ending. The masculine nouns in i and u , and sometimes also the feminines, have an anomalous locative ending in $\acute{a}u$; in this case the final vowel of the crude form is thrown off, or changed into y , as $paty\acute{a}u$, $sakhy\acute{a}u$, from $pati$, “a master”, $sakhi$, “a friend”. We believe that Bopp is perfectly right in supposing (*Vergl. Gramm.* p. 228) that $\acute{a}u$ stands for $\acute{a}s$, a change which we also find in the dual ending of the nominative, accusative, and vocative, and consequently that it is a form of the genitive, which is used with a locative meaning like the Greek $\alpha\upsilon\tau\omicron\upsilon$, $\omicron\upsilon$, &c. and the Latin *humi*, *domi*. It is to be remembered too that, in the dual, the genitive and locative are identical; they both end in $\acute{o}s$.

In the dual the Sanscrit instrumental and dative are identical with each other and with the ablative. The termination is always *-bhyám*.

In the plural, the implementive ends in *-bhis*; the dative and ablative in *-bhyas*, and the locative in *-su* or *-shu*.

It now remains to inquire what is the relation, in form or otherwise, between these cases and the Greek dative, in which their meanings seem to be included. The characteristic of the Greek dative singular is $-ι$ or $-\phi ι$; of the dative dual $-ι ν$, it being identical with the genitive of that number; of the dative plural $-ι σ ι$ or $-ις$. Bopp has remarked (*Abh. Ak. Berl.* 1826, p. 78) that the Sanscrit prepositions $\acute{a}$ and *abhi* are synonymous; that the former constitutes the singular instrumental ending, the latter, with an end-syllable $-\acute{a}m$, the dual $-bhyám = bhi-\acute{a}m$, and, with the end-letter $-s$ or end-syllable $-as$, the plural *bhis* or *bhyas*. The dative and locative singular present *abhi* under the different forms of ai and i , the former standing for *abhi* just as *tais* does for *tábhis*, and the latter for *bhi* just as $\alpha\upsilon\tau\acute{\omega}-ι$ does for $\alpha\upsilon\tau\acute{\omicron}\phi ι$, $\alpha\upsilon\tau\acute{\omicron}-ι ν$ for $\alpha\upsilon\tau\acute{\omicron}-\phi ι ν$, and $\alpha\upsilon\tau\acute{\omicron}-ις$ for $\alpha\upsilon\tau\acute{\omicron}-\phi ις$. The Etruscan inscriptions as compared with the old Latin, on the tables of Gubbio, present *ufeph = ovi*, *fitluph = vitlu* (= *vitulo*), &c. (Müller, *Etrusker* I. p. 48). With the exception of the singular instrumental ending $\acute{a}$ (which is indeed synonymous with *abhi*, *-bhi*), we see that the terminations of the Sanscrit implementive, dative, and locative, are all resolvable into one analogous to the Greek $\phi ι$. The Latin *ti-bi*, *vo-bis* present us the same

form and its plural variation, for as the nominative and accusative plural are formed from the same cases in the singular by the addition of the plural *s*, so we may conclude that the plural of $\phi\iota$ would be formed by turning it into $\phi\iota s$, as *bi* is turned into *bis*. The termination $-(\phi)\iota\nu$ bears the same relation to $\phi\iota s$ that $-\mu\epsilon\nu$, in the verb-endings, does to $-\mu\epsilon s$, the other form. The Sanscrit locative plural ending $-su$, $-shu$ is identical with the Greek $-\sigma\iota$, $-\iota\sigma\iota$. We have before remarked, that the letter *n* is the most striking mark of the locative, and that we find this letter at the end of locatives of all genders. The ν ἐφελκυστικόν, then, which we so often see at the end of Greek datives plural, is not a merely arbitrary addition, but a real part of the word, dropped according to laws of euphony in the newer language. The *anusvārah*, or nasal at the end of the plural locative in Prâcrit, points to a similar final *n* in that language. For the Sanscrit *su*, *shu* we find *shva*, *hva*, in Zend, from which Bopp not unreasonably concludes (*Vergl. Gramm.* p. 288), that the original form of the Sanscrit plural locative ending may have been *sva*, which leads us at once to the reflexive pronoun *sva*, Greek $\sigma\phi\epsilon$, and is, therefore, identical with the collective termination $-\sigma\sigma = \sigma\phi\sigma$. The relation of $\sigma\phi\iota\nu$, the locative of this pronoun, to the locative ending $\phi\iota$, $\phi\iota\nu$, is clear from what we have said in a former chapter. The termination of the dative plural in Greek is generally $-\iota\sigma\iota$. The same is generally the case in Sanscrit also. Thus, *vr̥ikā-s* makes locative plural *vr̥ikē-shu* = *vr̥ikai-shu*. At other times the crude form is not thus altered. This is the rule in Sanscrit feminine nouns. Thus, *jihvā*, “a tongue”, makes *jihvāsu*. It also holds in certain Greek words, as in the feminine Ἀθήνησι, Ὀλυμπίασι, θύρασι, &c., and even in masculines, as ταμίασι (Böckh, *Corpus Inscript.* I. p. 80). We are at liberty, therefore, to conclude that the locative plural is formed from the locative singular by the addition of the collective ending $-sva$, the characteristic *i* of the latter being absorbed in the long $\hat{a}$, $\bar{a}$, of the words which we have mentioned as exceptions.

Of the locative-ending $-\theta\iota$ we have spoken in a former chapter.

(5) ABLATIVE.

The plural ablative in Sanscrit has the same termination as the dative; the dual ablative is identical with the instrumental

as well as with the dative. The connexion in meaning between the dative and instrumental cases we have just shown. The Sanscrit ablative properly expresses removal from a place, i. e. it answers to the question "whence". It will easily be perceived how this might be resolved into the idea of a cause or instrument, and also how the same meaning might be made applicable to the ordinary use of a dative; for instance, "I give to him" might be represented by "I give through him," or "he is the cause as well as the object of my giving," for in such cases the object *to whom* is very often the cause *by which*.

The characteristic of the ablative singular is *-t*, when the crude form of the noun ends in *ā*; in other declensions it more nearly resembles the genitive, with which also it corresponds in meaning. The English writers on Sanscrit grammar consider *-āt* as the termination, but Bopp rightly concludes (*Vergl. Gramm.* p. 209), from the analogy of *mat*, *tvat*, the ablatives of the first and second personal pronouns, and of the Zend ablatives, that the ablative-ending is merely the letter *-t*.

We find this termination in the Latin *met* = Sanscrit *mat*, which appears in the combinations *egomet*, *memet*, &c., and in the conjunction *se-d*, more anciently written *se-t*. Under the form *-d*, this ending appears as the regular characteristic of the ablative in old Latin. Thus, on the *columna rostrata* we have *præsentēd sumod dictatōred olorom in altod marid pugnad vicet*.

It is to be remembered, that in Latin the same letter appears as the characteristic of the neuter-objective singular as in *id*, *illud*, &c.; also in the neuter plural; thus, in the *Senatus Consultum de Bacchanalibus*, we have *quei advorsum ead fecisent*, and as *me*, *te* (anciently *met*, *tet* or *med*, *ted*) appear both as accusatives and ablatives, so *sed*, which appears as an ablative in its conjunctive use, is an accusative in the *senatus consultum* just mentioned, where it appears after *inter*. This brings us back again to what we said on *ā*, which, though a preposition denoting mere position, is used in an instrumental sense. To us it appears nearly certain, for reasons which we will give directly, that the ablative-ending *-t* or *-d* is the second personal pronoun which appears under the forms *dva*, *dya*, *tha*, &c., and which, though it may and in fact does signify position, and indeed vicinity, is also used to denote the last term of a

series proceeding from the subject, i. e. the nearest to the subject, and hence proceeding or removal in general: for which reason, as we have shown above, it is used to form the superlative degree of adjectives.

The ablative relation in Greek is expressed by the genitive, with or without a preposition. In most Sanscrit words this relation is also expressed by the genitive, or by a form very nearly resembling it. We believe, notwithstanding what Bopp says (*Abh. Ak. Berl.* 1826, p. 97), that the genitive and ablative were originally identical.

The only instance in Greek of a near approximation to the Sanscrit ablative in *-t*, Latin *-d*, is to be sought in the adverbs in *-ως* as they are called. We find the ablative *-d* at the end of adverbs like *bened*, *facillumed*, which are clearly the old ablatives *bon(u)d*, *facillum(u)d*. In the same way *οὕτως*, *καλῶς*, &c. are the old ablatives of *οὗτος*, *καλός*, &c.; for in the Greek language euphony will not allow the appearance of a *δ* or *τ* at the end of a word, and *ὁμῶς* bears the same relation to its Sanscrit synonym *samât* that *δίδωσι* does to *dadâti* (Bopp *Vergl. Gramm.* p. 205). In the ordinary Greek dative the final *s* may have dropped off, as is the case with *οὕτω* compared with *οὕτως*. But it is better to consider, as we have done, that the Greek dative is a representative of the old locative case in *i*.

We have before seen this termination of the ablative under the Latin form in the adjective *ἰδ-ιος*. A comparison of *Ἀφροδίτη* with the Sanscrit *abhrâditâ* “she who comes out of a cloud” (from the ablative *abhrât*, written *abhrâd* in composition, and *itâ*) shows that the first part of the word is the ablative of *ἄφρος*, which is written *ἄφροδ* instead of *ἄφρωδ* in consequence of the succeeding long vowel, which would otherwise have been short: comp. *ἴτης*, *ἴταμος*, &c. (Bopp, *Vergl. Gramm.* p. 216 Note).

(6) GENITIVE.

The endings of the genitive singular in Sanscrit are *s*, *syâ*, *as*, and *âs*. The latter is appropriated to feminine nouns which end with a vowel; thus *prîti-s* “love” makes *prityâs*, which is perfectly analogous to *πόλεως*, for that this was a dissyllable (probably pronounced *πόλυως*) appears from its accentuation,

and its frequent use at the end of a *senarius* in the Attic dramatists. When the final vowel of the feminine stem is long, this termination is invariably preceded by *y* or *v*, as *jihvâyâs*, *vadhvâs*; when the final vowel is short it is optional whether we write a *guna* of the vowel and the simple *s* ending, or the full ending in *yâs*. Thus, we may have from *prîti-s* not only *prityâs*, but also *prîtês* = *prît-a-i-s*. The termination *y-us* corresponds precisely to the Latin *j-us* in *cujus* for *quo-i-us*, &c. The terminations *s* or *âs* are used according as the stem ends with a vowel or a consonant. In the former case the termination may still be considered as *-as*, for the vowels *i* and *u* are always affected with *guna* in the genitive: thus, *pati-s* "a master" makes *patês* (= *pat-a-i-s*), and *sûnu-s* "a son" makes *sûnôs* (= *sûn-a-u-s*). In all these instances the genitive corresponds to the ablative. When, however, the ablative-ending is *-at*, the genitive ends in *-sya*: thus, *vrîkâ-s* makes ablative *vrîkât*, genitive *vrîkasya*. To this, as we have before shown, the Greek genitive in *-οιο* bears the same relation that *ἐδίδου* does to *ἐδίδοσο*, the form required by analogy: so that *τοῖο* should be written *τόσιο* (Sanskrit *tasya*), and *λύκοιο* should be written *λυκόσιο* (Sanskrit *vrîkasya*). The Homeric forms in *-ao* (*Βορέαιο*, *Αἰνείαιο*) stands for *-a-io*, and this for *-a-σιο* (Bopp, *Vergl. Gramm.* p. 220). We observe that this genitive ending, which is peculiar to the Sanscrit declension in *ã*, does not affect the final syllable of the stem with *guna*: it is also probable that the *guna* of the final syllable in the ablative of this declension, and the genitive and ablative of other declensions, is occasioned by the loss of some final vowel or vowels, as in *Ἀφροδί-ιτη* mentioned above. Since, therefore, there is no reason why the genitive and ablative should be different in the first, and identical in the other Sanscrit declensions, we conclude that the genitive and ablative of the first declension are to be considered as merely by-forms of one another. This is almost reduced to certainty by the following fact. We have mentioned above, that the old ablative is still preserved in the adverbs in *-ως*, and we have seen this adverbial termination in the Greek genitives, like *πόλεως* corresponding to the Sanskrit *prîtyâs*, &c., which, therefore, are only by-forms of *prîtyât*, &c. Again, possessive adjectives like *δημόσιος*, &c., are obviously connected with the genitives *δημό(σ)ιο*, &c. (Bopp, *Vergl. Gramm.*

p. 294, Note). But ἴδιος, a possessive of the same kind is clearly formed from the ablative of the pronoun ἵ, and ἴδιος bears the same relation to ἴσος that *medius* does to μέσος = μέσιος; from all which we conclude that the ablative *vrīkāt* = *vrīkātya* = *vrīkāsya*, the genitive, and that the genitive and ablative are identical in Sanscrit as they are in Greek. Among other advantages presented by this view of the case, the termination of the ablative admits now of an easier explanation; it is in fact *tya*, just as the ending of the dative is *aya*.

The genitive-ablative relation is also expressed by -θεν in Greek. The connexion of this suffix with the Latin -tus, Sanscrit *tas*, *thas*, *das*, *dhas*, we have already pointed out, and it will easily be seen what relationship subsists between *humanit-us* and the proper adverb *humaned* (comp. *bened* &c. in the *columna rostrata*), or between οὐράνοθ(εν) and the genitive οὐρανό(σ)ιο.

The genitive plural does not bear any direct and immediate resemblance to the ablative plural in any of the languages with which we are concerned. Its sign is -ām in Sanscrit, -ων in Greek, and *um* in Latin. In Sanscrit an euphonic *n* is generally inserted between the final vowel of the crude form and the termination, and this *n* is often represented by *r* in Latin; in Greek this *n* has disappeared altogether; but λύκων may be a representative of λυκόνων, as μείζω is of μείζονα, &c. (Bopp. *Vergl. Gramm.* p. 286 note). We are convinced that the long *ω* and *ā* of the Greek and Sanscrit genitive plural includes either the element *ya*, which is so often comprised in *η*, so that the genitive plural will be analogous to the comparatives in -ίων, *īyāns*; or else the element *va*, also a mark of the genitive singular, has been absorbed, as in the Greek feminines in -ώ, corresponding to masculines in -ύς = *Fis*, and to Slavonic feminines in *va* or *o-va*. In either case the plural sign *s* has been absorbed, as in *vrīkân* for *vrīkāns*.

(8) VOCATIVE.

The vocative is either the crude form of the noun, the vowel being generally represented by the lightest form *ε*, *ε*, or the same as the nominative. The nominative case corresponds to the third person of the verb; it presumes a subject spoken of. The vocative corresponds to the second person: it presumes a subject spoken to. We believe that the first arose from the second; the idea of

a subject in its objectivity being suggested by conversation with another subjective reasoning being ; for this reason the sign of the nominative case is identical with the element of the second personal pronoun. In the second person of the imperative mood, where the person spoken is most directly and impressively addressed, we find sometimes the crude form of the verb as *τύπτε*, at other times the element of the second personal pronoun more strongly expressed, as in *κλῦ-θι*; for the other persons of this mood a stronger form is invariably adopted. The vocative *λύκε* stands related to the imperative *τύπτε* just as the nominative *λύκο-ς* does to the indicative *τύπτεις* for *τύπτε-σι*.

CHAPTER III.

THE PRONOMINAL TERMINATIONS BETWEEN THE ROOT AND CASE-ENDING.

THE root of a noun or verb, which properly speaking never exceeds a single syllable, may, as we have said before, be considered as the independent variable; the noun or verb is a function of this variable, and contains, besides the root, in the former instance, a set of case-endings, in the latter a set of person-endings, both of pronominal origin. But between these case and person-endings we find, frequently in the verb, and generally in the noun, a derivation-suffix. Having discussed the case-endings of the noun, we proceed to the consideration of these derivation-suffixes, which determine the class the noun belongs to, and declare the particular modification of meaning with which it is used. Of the prefixes, which express the relation in space that the noun is supposed to bear to the other words in the sentence, we have spoken under the head of the prepositions. We do not intend here to mention those compound words which contain two or more distinct verbal or nominal roots. We shall confine ourselves to those suffixes which are of pronominal origin, and which may therefore be considered as the constants of the function; compound words are, as it were, functions of two or more variables.

In these pronominal suffixes we observe all the peculiarities which we have noted in the pronominal elements separately considered; there is not one monosyllabic or primary pronoun which does not appear as a termination, and scarcely one combination of monosyllabic pronominal elements which is employed independently but is applied to this purpose. But though we can most clearly trace the pronominal elements in these formations, it is scarcely possible to assign them a definite meaning on all occasions, any more than we can translate literally all the long compound pronouns. That they had a distinct signification at one time cannot be doubted, and it is at least useful, for the purpose of classification, to arrange the terminations according

to the significant pronouns to which they externally correspond, even though we are not able to assign to them, in their use as suffixes, a meaning perfectly and perceivably identical with that which they bear when used independently.

The three primary monosyllabic pronouns are, as we have seen, (1) *pa* (*ma*); (2) *ka*, **Fa**; and (3) *ta*: the first expresses the idea of "here"; the other two are modifications of the idea of "there," distinguished according to the relative nearness or farness of the object. These primary words are, we have seen, compounded with each other, and otherwise modified, in a great variety of ways. The second admits of the greatest number of modifications; its original and proper element **Fa** or *ka* becomes *qva*, *sva*, *va*, *sa*, *hva*, *ha*, *ka*, *pa*, *ga*, and *ya*; and, when it is represented by the compound *ta-va*, it becomes *dva*, *da*, *tva*, *tu*, &c. The third is changed only into *na*. Either of these stems may be strengthened or rendered more emphatic by the addition of the affix *-ra*. It seems highly probable that the pronominal elements *va* (to be distinguished from *va*, a modification of the second pronoun,) and *na* are variations of the first and third original elements. The Sanscrit vowels and diphthongs *ā*, *ā*; *ī*, *ī*; *ē*; which are all used as pronouns in composition, are only initials.

(1) Compounds with the first pronominal element only.

The termination *-μο-ς* masculine, *-μη* feminine, is generally found with a class of nouns which represent the action of the verb, and may be expressed by the infinitive active used as a noun: thus *σεισ-μός*, "the shaking", = *το σείειν*, *ποτ-μός*, "the falling", = *τὸ πίπτειν* (root *πετ-*); or the thing in which the action of the verb is exemplified; as *δῆ-μος*, *δη-μός*, "that which binds" i. e. either an inclosed field or village (like the English "toun" from "twine", which signifies both a field and a town), or the fat in which the thighs were wrapt up for sacrifice; *ῥετ-μός*, *ré-mus*, "that which rows", &c. We observe the same meaning in *μνή-μη* "a recollecting", *ἐπιστή-μη* "an understanding", &c. Nor can we agree with Buttmann (*Ausführl Sprl.* § cxix. 22) in thinking that the ending *-μη* is ever equivalent to *-ματ*. The termination in *-μος* is generally preceded by *σ*, as in *θεσ-μός*, from *τίθημι*, *δεσ-μός*, *δεσ-μή*, from *δέω* (compare however *δη-μός*), or by its representative *θ*, as in *ἀριθ-μός*, *ἄρθ-μός*, *ῥυθ-μός* (compare how-

ever ῥῡ-μός). A κ is occasionally aspirated, as in πλοχ-μός, from πλέκω, ἰωχμός, from ἰώκω, or even inserted instead of σ or θ as in αὐχμός, from αὐώ.

(2) Compounds with the second pronominal element only.

The terminations in -σις, -τύς, both feminine, agree in meaning with those in -μός: thus πῶκ-σις, “a doing”, μίμη-σις, “an imitating”, φά-σις, “a showing”, &c. ἐδη-τύς, “an eating”, ἐπη-τύς, “a showing compassion”, ὀρχησ-τύς, “a dancing”, πρακ-τύς, “a doing”, &c. These two are related as τύ and σύ: between them stood the old form in -τις, as φά-τις, “a speaking”, μῆ-τις, “a thinking”, πύσ-τις, “an enquiring”, &c. Compare the Latin *pestis*, “a destroying” (root *per-*), *vestis*, “a covering”, &c; *potus*, “a drinking”, *spiri-tus*, “a breathing”, and compare *por-tus* with πορθ-μός. To this class belong the Latin supines in -tum and -tu, and the Greek verbals in -τεος, -τος. By the side of the words in -τυς, expressing an action, we have a set of masculine nouns in -της denoting the corresponding agents: thus with ἐπη-τύς, ὀρχησ-τύς we have ἐπη-τής, ὀρχησ-τής, &c. We shall show directly that these endings are connected in origin as well as signification with the verbals of which we are speaking.

The termination -σος = σφος implying a collection, is a representative of the full form of the root **Fa**. We have spoken above of its use in forming pronominal adjectives like ὄ-σος, ἰ-σος, &c. It also appears in substantives, as in θία-σος, “a collection of sacred persons,” θύρ-σος, “a collection of leaves,” πυρ-σός, “a gathering of fire.”

Of the modifications of the second pronominal element the form -κός is very common as an adjective ending. The terminations -ᾱ-κ-ς, -ε-κ-ς-, -ᾱ-κ-ς, -ῖ-κ-ς, -ύ-κ-ς, and the Latin -i-c-s are only modifications of this ending, as the adverb-ending -κ-ς is of -κίς, comp. ἁλώπηξ with the Sanscrit *lôpâka*, κάλυξ with the Sanscrit *kalaça* (“a water jar”); ἄπαξ with the Sanscrit *êkaças*, and the forms τετράκίς, &c. From these we must distinguish those words in which the guttural belongs to the root and the -ς constitutes the ending, as in ἐπιμίξ (root μιγ-), ὁδάξ (root δακ-). This termination κός expresses a quality in answer to the question “what?”—as in ποιητι-κός, “like a poet,” ἀνδρι-κός, “like a man,” &c.: just so *bâla-ka* = *puer qualis?* in Sanscrit (Pott *Etym. Forsch.*

II. p. 458). Still more common is the termination in *-ιος* answering to the Sanscrit *yā-s*: in fact there is hardly a root or termination to which it may not be joined with a qualitative meaning. Under the form *-ίας*, *-ίου*, it is of extensive use in the construction of qualitative nouns *νεανίας*, *κουρίας*, &c., and of proper names expressing a quality, as *Καλλίας*, *Λοξίας*, *Ἰππίας*, *Νικίας*, &c. We recognize this suffix also in the numerous class of abstract nouns ending in *-η*, and in those, denoting agents, in *-ης*: thus, *ἀρχή*, *τριηράρχης*, stand for *ἀρχυά*, *τριηράρχυας*, just as *τριηράρχεω* represents *τριηράρχυαμι*. It is not, however, subjoined to the ending *-κός*, to which it appears to be perfectly equivalent (compare *ἀνδρείος* with *ἀνδρικός*), nor can we persuade ourselves that it is ever appended to the simple element of the second person, though some scholars have suggested that terminations like *-σιος* in Greek and *-sya* in Sanscrit are compounds of *sa* and *ya*. We believe that the terminations *-σις*, *-σία*, are perfectly equivalent in form as they certainly are in meaning, and differ only from the form in *-ία* by being more complete. A third class of qualitative endings is connected with the modification *-va*. These appear in a very mutilated form and therefore the real termination is not discernible at first sight, at least in the uncompounded state; with the addition of the third pronominal element this suffix becomes more obvious in Greek: without that addition it is not used in Sanscrit. In Greek we have *γραφε-ύς* = *γραφι-κός*, *ἰππε-ύς* = *ἰππι-κος*, &c. The word *βασι-λεύς* does not belong to this class. It is compounded of *λαός* (*λεῖος*, *λεύς*), and a root *βᾶσι-*, of which we can only say that it seems to be the same as that *βᾶγός*, *βᾶ*, a vocative (see Valcken. *Adonias*. p. 383): compare *Οἰ-λεύς*, *Ἀγησί-λαος*, &c., and see Pott *Etym. Forsch.* II. p. 278. The feminine corresponding to this masculine ending is *-ώ*; thus *Πρωτε-ύς*, *Πρω-τώ*; *Νηλε-ύς*, *Νηλ-ώ*; *θεμιστε-ύς*, *θεμιστ-ώ*, &c. The words *εὐ-εστ-ώ* (Sanskrit *sw-asti*), *κακεστ-ώ*, *ᾄει-εστ-ώ* and *ἐστ-ώ* belong to this class. We shall point out the connexion between the masculine and feminine of this suffix when we come to the compound terminations. The nouns in *-πός* seem to contain the second pronominal element in its Attic form (*ποῦ*, *ποθεν*, &c.): as *μαστρο-πός* (see Eustath. 308, 2), *χεδρο-πός*, *χαρο-πός*, and perhaps *ἀστέρο-πος* (*Schol. Eurip.* 373), and *κάρδο-πος*. The solitary form *ἐχθο-δο-πός* contains this ending, subjoined to the element *δο-*,

of which hereafter. It is possible that this ending may also lurk in the Homeric ἡπε-ρο-πε-ύ-ς, ἡπε-ρο-πε-υ-τή-ς, the root of which seems to be contained in ἀπα-τή.

(3) Compounds with the third pronominal element only.

It might be supposed that the termination -τη-ς gen. -του, which signifies a male agent, as κρί-της “a judge,” &c., consists of the third element only. There is reason, however, to believe that the nominative case at least includes the element *ya*: we have spoken of this before and shall return to it when we come to speak of the nouns in -δη-ς, &c. Words formed with the ending -της are sometimes passive; thus γεγε-της means both “father,” which is the more common meaning, and “son” (Soph. *Œd. Tyr.* 470. Eurip. *Ion.* 916). We have also ἀτί-της “dishonoured” (Æschyl. *Agam.* 72, *Eumen.* 246), ἀειγεγέ-ται θεοὶ in Homer = αἰὲν ἑόντες, and Pindar calls Bacchus κισσοδέ-ταν θεόν (*fr.* 45, 9). But this meaning is more generally found with words in -τος, which termination appears not only in a large class of words with a passive signification; but also in the ordinals and superlatives. In the two latter cases it is probable that the termination is connected with -θεν the mark of the genitive case, and, therefore, with the second pronominal element, and the verbals in τεος, τυς, τις, &c. Although the termination of the passive participle in Latin and Sanscrit is identical with that of the supine, as it is called, in Latin, and the Sanscrit infinitive, and though it is clear that these supines and infinitives are of the same origin with the verbals above mentioned, it may be doubted whether we ought not to regard the termination of the passive participle as resulting from the third pronominal element only, and therefore as different from that of these verbals. It should be mentioned that these forms differ by a *guna* of the root in Sanscrit, a difference which may indicate that the endings are not identical. Another reason for inferring a difference between these endings and the verbals formed from the second stem is, that the former perfectly coincide in meaning with the words formed with the suffix -vos which certainly has no connexion with the second element, and contains only the third in its strongest form. Thus both -τος and vos are used to form passive participles, compare *ple-nus* and *re-ple-tus*, *bhâ-nu-s* and *bhâ-tu-s* (both signifying the Sun in Sanscrit), the pronouns

ê-na and *ê-ta* in the same language, and *σεμ-νός*, *σεπ-τός*, in Greek. The words *δει-νός*, *στυγ-νός*, *ποθει-νός*, *έλει-νός*, &c. are all passive participles. It will be remembered too that *n* and *t* are inserted in the present tenses of verbs in precisely the same manner, thus *τυπ-τ-εῖν* and *τέμ-ν-ειν* in Greek, *si-n-ere* and *flec-t-ere* in Latin (Pott *Etym. Forsch.* II. p. 467). The qualitative nouns in *-τητ-s* (*τη-s*) *-τητος*, Latin *tat-s* (*tâ-s*) *-tatis*, appear to be formed either from ablative cases of the third pronominal root, or by combination of the ending *τη = τγα* with that of the third element. The termination *-νη* is found with a similar meaning in *ἡδο-νή*, *ἀγχο-νή*: more clearly developed when compounded with the first and second elements as in *χαρ-μο-νή*, *δικαιο-συ-νή*, and the adjectives *κριθά-μι-νος*, *πυρά-μι-νος*, *γηθό-συ-νος*, *κηδό-συ-νος*. The words *κ-ρου-νός*, *κ-ρή-νη*, from *ἐκ-ρέω*, deserve particular notice on account of the aphæresis of the preposition. The word *ξέ-νος* appears to be of similar formation, compare the Italian *straniero* from *extraneus*, and the Greek *ἐχ-θος*, *ἐχ-θ-ρός*, &c. Hesychius says *ἐχθοι*, *ἐξω*.

(4) Terminations compounded of the first and other pronominal elements.

Of these the common are the compounds of the first and third pronouns. We have participles in *-μενος* (Latin *-men*, *-mnus*, Sanscrit *-mâna-s*), and nouns in *-ματ*. These nouns and participles are equivalent in meaning; the latter is only a longer form, with a substitution of the termination *-νο-s* for the element *-τ*. Thus $\left\{ \begin{array}{l} \text{πραγ-μα-τ} \\ \text{πε-πραγ-με-νον} \end{array} \right\}$ equally signify a thing done.

The Latin and Sanscrit sometimes repeat the third pronominal element, as in *ar-me-n-tum*, *mo-me-n-t-um*, &c., in the former language, *cri-ma-n-t-as*, &c., in the latter. The Greek compound suffix often assumes the form of *-μω-ν*, as in *λει-μώ-ν*, *γνω-μών*, *πλη-μών*, &c., to which *ser-môn*, *pul-môn*, &c., correspond in Latin: it sometimes appears as *-μο-νή*, as in *χαρ-μο-νή*, *πεισ-μο-νή*, *φλεγ-μο-νή*, *πλησ-μο-νή*, *πη-μο-νή* (comp. *πη-μα-τ*.), and *ἀρ-μο-ν-ία* (*ἀρ-μο-νι-κό-s*).

(5) Terminations compounded with the second and other pronominal elements.

Under the form *ya* or *-va* or *-ha* the second pronoun forms with the third the termination *-ya-t*, *va-t*, or *va-n-t*, in Sanscrit,

For or **hot**- in Greek. Like the shorter form in **-v̄-s**, this ending generally confers a qualitative meaning: thus, *sinha-vat*, “lion-like”, *bhaga-va-n-t*, “prosperous”, *bha-va-n-t*, “a Lord” (from *bhā*, “splendour”), *φῶς*, *φωτός*, for *φαFor-s*, *πάτρως* for *πατριFor-s* (here the Sanscrit *pitr̥-vyas* presents a longer form of the second pronoun), and the participles in **-ws = For-s** (compare the neuter and oblique cases). To the Greek compound terminations in **-ws = For-s** we have a feminine in **-vîa**, in which the *v*, or labial part of the digamma, is still seen. To the shorter but analogous termination in **-v̄-s** we have a feminine in **-ῶ**. Here the case is reversed, the masculine having kept, while the feminine has lost, its characteristic breathing. We are disposed to infer from the feminine ending **-vîa**, and from the appearances to which we have before called the reader’s attention, that the termination **-v̄-s** was originally written **-vis** or **-Fis**, and that the termination **-ῶ** is a contraction of **Fa**, as in the genitive plural. We have endeavoured to show before that the vowels *i*, *u*, never appear but as the representatives of some lost or vocalized consonants, and we think that whenever they are found in a Greek termination, we may conclude that the element of the second pronoun is comprised in it. The Sanscrit feminine corresponding to the Greek in **-vîa**, is **-ushî**. It is singular that the feminine noun *Ἡώς* corresponds to the Sanscrit *ush-as*, and the form *ἑστὼ* to *âsti-kya*. It is also curious that in the Slavonic languages *o-va* corresponds to the Greek ending in **-ῶ**, as *Janova* = *Joannis uxor* (Pott, *Etymol. Forsch.* II. p. 486). With the third pronominal root under the form **-vñ** the second makes a class of abstract nouns in **-σύνvñ**, as *σωφρο-σύνvñ*, *δικαιο-σύνvñ*, *καλλο-σύνvñ*, &c., which are nearly equivalent in meaning to those in **-vñ** and **μο-vñ**. We have no hesitation in classifying the termination **-ι-vos** with **σύνvñ**, to which it bears the same relation that **-ι-mos** does to **-σι-mos**, **-ios** to **-σιος**, **-ia** to **-σις**, and the genitive in **-io** to that in **-σιο**. The adjectives in **-ι-vos** express the material out of which any thing is made, or rather they imply a mixed relation, of quality and origin, to the object denoted by the substantive from which they are derived. Thus, *ξύλ-ι-vos* means “of wood”, “wooden”, *ἐλε-ι-vός*, “pitiable”, &c., and *ἀληθ-ι-vός* signifies “genuine”, i. e. “made up of that which is true”. This last adjective is particularly applied to express that which is all that it pretends to be,

for instance, pure gold as opposed to adulterated metal. Compare the ἀληθινὸν στράτευμα of Xenophon (*Anab.* I. 9, § 17) with the καθαρὸς στρατὸς or τὸ καθαρὸν τοῦ στρατοῦ of Herodotus (I. 211, IV. 135) and Thucydides (V. 8), where the reader will remember that the better class of citizens are contrasted to those of lower origin as good coin is to bad (see Aristoph. *Acharn.* 517; *Ran.* 719 foll.). This force of ἀληθινὸς seems to have escaped the notice of all the commentators on Theocritus (XIII. 14, 15):

ὥς αὐτῷ κατὰ θυμὸν ὁ παῖς πεποναμένος εἶη,
αὐτῷ δ' εὖ ἔλκων ἐς ἀλαθινὸν ἄνδρ' ἀποβαίη,

where ἔλκων does not refer to oxen drawing the plough, as the editors suppose, but bears its common sense of "weighing", "being heavy", "drawing down the scale". So that the passage means that Hercules brought up Hylas with a view to expell all dross and adulteration from him, in order that he might, by "weighing well" like pure gold, turn out a genuine man: just as Plato, speaking of the military caste in his state (*Resp.* IV. p. 428 E), says, πότερον οὖν ἐν τῇ πόλει οἶει ἡμῖν χαλκέας πλείους ἐνέσσεσθαι ἢ τοὺς ἀληθινούς φύλακας τούτους; because, according to his fiction, the artizans were made of copper or steel, but the guardian soldiers of pure silver (III. p. 415 A). The adjectives in -ι-μος or -σι-μος express a quality by virtue of the first part of their termination, and also an action like the nouns in -μος. It is difficult to believe that the large class of words in -ιτης, -ιατης, -ατης, -ητης, -ωτης, ought to be classed among those terminating with the affix -της only: for, if so, how are we to account for the penultimate syllable? It may seem strange that the Greeks should have written πολιήτης, or πολίτης, but δημότης, φυλέτης, but it cannot be denied that the former contains something in addition to the termination of the two latter. We must endeavour to ascertain what this addition is. The termination -ίτης, which is probably always an abbreviation of -ιατης or -ιήτης, is appended to substantives of all declensions; thus, χωρίτης from χώρα, ὀπλίτης from ὅπλα, πολίτης from πόλις. With the exception of ἡπειρώτης from ἡπειρος, the termination -ώτης is appended to those nouns only which end in -ια and -εια. Now these nouns are combinations with the second pronominal element under the form γα: thus,

Ἰταλ-ό-ς, Ἰταλ-ία, Ἰταλ-ιώτης. In this case, therefore, we conceive the termination is compounded of the second and third pronominal elements. May not the others be so likewise? In the Latin terminations *ās* (for *āts*) genitive *-ātis*, the third pronominal element does not appear in so full a form as it does in Greek, but the length of the penultima points to a combination of the two elements as in the Greek. The whole question will be set in a clearer light, if we consider in general what is the origin of the ethnic names. Now, either the name of the country is derived from that of the people or *vice versâ*. When the former is the case, the name of the country generally ends in *-ία* or *-ική*, which are relative endings affixed to the gentile name: thus, Ἰταλός makes Ἰταλία, Λάκων makes Λακωνική. But there were two classes of inhabitants in countries of which the Greeks were wont to speak and write; the native inhabitants, and the Greek settlers. Thus, if Ἰταλία is the country of the Ἰταλοί, a person living and acting there would be Ἰταλι(ῶ)της, which is therefore a secondary formation, or includes both pronominal endings. The Romans, in like manner, would call *Hispan-ia* the land of the *Hispan-i*, but a Roman living there would be called *Hispaniensis* (see Ruhnken *ad Sueton. Cæsar.* § 37). If all the Greek nouns of which we are speaking are secondary functions, we can now understand why we have πολίτης, πολίτης, but φυλέτης, and δημότης. The two latter are derived from the substantives φυλή, δῆμος, which are themselves formed from the verbal roots φυ-, δφε, by the suffixes -λη, -μος; the introduction of the syllable *γα, ια*, would therefore be quite superfluous. But πόλ-ις from the root πολ- (πολύς, &c.) is equivalent to πολία, just as the suffixes -σις and -σια are identical; the form πολιήτης, πολίτης, is therefore necessary for the second derivative. For ἡπειρώτης, ὀπλίτης, we must suppose intermediate forms ἡπείριος, ὀπλιος; the latter is presumed in the secondary derivative, and may be inferred from the words ἐνόπλιος, πανοπλία. In like manner for the patronymics -ίω-ν, ἰώ-νη, ἰ-νη, we must presume intermediate proper names in -ίας, ἰα. It is important to remark that the nouns in *īās* have occasionally by-forms in *-ίτης*, thus, we have both νεβρ-ίας and νεβρίτης, the latter having a compound, the former only a simple ending. Pott's supposition (*Etymol. Forsch.* II. p. 559), that *-ια-της*

contains the Sanscrit root *i* or *yá* “to go”, is not worthy of any attention.

(6) Terminations compounded of the third and other pronominal elements, and reduplications of the third pronominal-ending.

One of the most frequent of these combinations is that of the elements *ta* and *ra*. We have seen this combination in the numerals. As a termination it appears under the forms -τε-ρο-ς, -τερ-ς, -τηρ-ς, -τορ-ς. In import these forms differ little from the simpler ending -της. According to Buttmann (*Ausführl. Sprl.* § 119 B.) the latter is more general and is used as a kind of participle; thus, while οἰκήτορες means—the *inhabitants* of a country,—we have in Plato, *Phædo*, p. 111 c, καὶ δὴ καὶ θεῶν ἔδῃ τε καὶ ἱερὰ αὐτοῖς εἶναι, ἐν οἷς τῷ ὄντι οἰκητὰς εἶναι θεούς, “in which the gods really dwell.” In some cases the difference seems to have been merely that the Attics preferred the stronger form in -τήρ: thus, they wrote γνωστήρ for γνωστής, δοτήρ for δότης, &c. (Pierson *ad Mærid.* v. γνωστήρας). Nouns in -τήρ may even be used with a passive signification, like some of those in -της: thus, we have ἐνδυτήρ πέπλος in Sophocles (*Trachin.* 671). The termination -τήρ does not differ at all in value from -τωρ. Words compounded with the latter are invariably paroxytones, with the former oxytones, a fact which we might thus express; the nouns expressing agency, which, either from being compounds, or from requiring emphasis on their root syllable, draw back the accent, change the termination -τήρ into -τωρ. Thus, πατήρ makes ἀπάτωρ, because the accent is thrown back towards the negative α, and we find ῥήτωρ not ῥητήρ, because the emphasis lies upon the verb-syllable. Just in the same way we have ἄφρων and σῶφρων from φρήν. Sometimes this compound termination appears under the forms -τ-ρό-ς, -τρα, and -τρο-ν, as in ἱατρός, παλαίστρα, κέντρον, which must be supposed to differ from -τηρ, as the more common -ta-ra does from -tva-ra found in *qua-tvor* (above p. 193), and as -της does from -τος. In Sanscrit we have both *trī* and *tār*, in Latin *tor*, -*tūrus*, the latter generally as a future participle; also in the feminine as a noun expressing the office or function of a person designated by the ending -*tor*; thus, *præ-tor*, *præ-tura*, &c. The forms -τοο-ς, -τρα, some-

times appear as $\theta\rho\sigma\text{-}\nu$, $\text{-}\theta\rho\alpha$, as in $\acute{\omicron}\lambda\epsilon\text{-}\theta\rho\sigma$, $\acute{\omicron}\nu\rho\acute{\eta}\text{-}\theta\rho\alpha$ (not connected with $\theta\acute{\upsilon}\rho\alpha$ as Horne Tooke supposes, *Diversions of Purley*, II. p. 316), $\pi\lambda\acute{\epsilon}\text{-}\theta\rho\sigma\upsilon$, &c. Giese suggests (*Æol. Dialect.* p. 108), that this aspiration of the τ is caused by the ρ . This, however, is not to be considered as inevitable, otherwise we should have no terminations in $\text{-}\tau\rho\sigma\text{-}\varsigma$. A similar change has taken place in $\theta\rho\iota\sigma$ compared with $\tau\rho\epsilon\iota\varsigma$, and in “three” compared with *drei*. The feminine of these terminations in Greek is $\text{-}\tau\epsilon\tau\rho\alpha$, $\text{-}\tau\rho\iota\alpha$, $\text{-}\tau\rho\iota\delta$, $\text{-}\tau\eta\rho\acute{\iota}\delta$, and $\text{-}\tau\rho\alpha\iota\nu\alpha$, in Sanscrit *trī*, and in Latin *tric*. These forms we have before explained. By the addition of the second pronominal element, we obtain the further forms $\text{-}\tau\acute{\eta}\rho\iota\sigma$ in Greek, and $\text{-}\text{torius}$ in Latin, both for substantives and for adjectives; thus, $\delta\rho\alpha\sigma\tau\acute{\eta}\rho\iota\sigma$, $\pi\sigma\tau\acute{\eta}\rho\iota\sigma$, *senatorius*, *victoria*. By a similar addition the Sanscrit verbal-ending *tav-ya* is formed from the second pronoun *ta-va*. The neuter forms in $\text{-}\tau\acute{\eta}\rho\iota\sigma$ denote the place where the work of the agent who is designated by $\text{-}\tau\eta\varsigma$, $\text{-}\tau\eta\rho$ is carried on. When we wish to speak of a similar place in reference to an agent defined by the ending $\nu\text{-}\varsigma = \text{F}\iota\varsigma$, it is only necessary to give the word an adjective form, and put it in the neuter gender. Thus, from $\tau\rho\phi\epsilon\text{-}\acute{\upsilon}\text{-}\varsigma = \tau\rho\phi\epsilon\text{-}\text{F}\iota\varsigma$, we have $\tau\rho\phi\epsilon\iota\sigma$ (compare $\text{-}\sigma\iota\varsigma$, $\text{-}\sigma\iota\sigma$, &c.). The comparatives in $\text{-}\iota\omega\upsilon$ from adjectives in $\text{-}\acute{\upsilon}\varsigma$ are other instances of this formation. Of the terminations $\text{-}\tau\lambda\sigma$, $\text{-}\tau\lambda\eta$, $\text{-}\theta\lambda\sigma$, $\text{-}\theta\lambda\eta$, which Pott (*Etymol. Forsch.* II. p. 555) considers as identical with $\text{-}\tau\rho\sigma$, $\text{-}\tau\rho\alpha$, $\text{-}\theta\rho\sigma$, $\text{-}\theta\rho\alpha$, we will speak by and by. The Latin language has terminations $\text{-}\text{ber}$, $\text{-}\text{bra}$, $\text{-}\text{brum}$, $\text{-}\text{cer}$, $\text{-}\text{cris}$, $\text{-}\text{crum}$, corresponding to the Greek suffixes which we have been considering: *cre-ber*, *verte-bra*, *mem-brum*; *pul-cer*, *volucris*, *sepul-crum*. The latter seem to be another form of the ending $\text{-}\text{culus}$, composed of the second element and $\text{-}\text{lus}$ ($\lambda\sigma$). A comparison of *u-ber* with $\acute{\omicron}\nu\text{-}\theta\alpha\rho$, and *ru-brum* with $\acute{\epsilon}\rho\nu\text{-}\theta\rho\acute{\omicron}\nu$, makes it possible that some connexion may subsist between these endings similar to that which we find between *fera* and $\theta\acute{\eta}\rho$. Bohlen (*das alte Indien*, II. 445) considers the ending $\text{-}\text{brum}$ connected with the Sanscrit *bhri* “to carry”, so that *candela-brum* would signify “the light-bearer”. Why not with the Latin root *fer*? With the element *na*, a modification, as we have seen, of itself, the third pronoun is combined in both ways; sometimes the former precedes, as in the participial ending $\text{-}\text{nt}$; this combination alone is found in Greek. In Sanscrit we have also $\text{-}\text{tana}$

and *-tna*, as *hya-tanas* = *hesternus*, and *nû-tnas* = *novus*. The Greek termination *-ντ*, whether it appears in nouns or participles, is always very much shortened and disguised: as *τύπτων* for *τύπτοντς*, *στάς* for *στάντς*, *χαριεῖς* for *χαριέντς*, &c. In the Latin participles it is more fully exhibited in the nominative case, as *amans*, *monens*, for *amants*, *monents*, and most completely in *quantus*, where the Greek has *πᾶς* for *παντς* (see Pott, *Etymol. Forsch.* II. p. 303). So also the proper names of places in the South of Italy and Sicily, which, in Greek, end in *-οντ-ς*, or *-αντ-ς* (*-ous*, *-as*), generally appear in Latin under the form *-entum*, thus, *Acragas*, *Taras*, *Pyxus*, *Maloeis*, *Crumoeis*, become *Agrigentum*, *Tarentum*, *Buxentum*, *Maleventum*, *Grumentum*. The transition step appears in the assertion that the Æolians formed these names as masculines in *-εντος* (see Niebuhr, *Hist. of Rome*, I. note 148). In Sanscrit and Latin the combination *-nt-* is appended to other pronominal stems, as in the compound suffixes *-mānt*, *-vānt*; *-mēntum*, *-le-ntus*. The termination *-nt* expresses the general state or being of any thing without any limiting accessory notion, hence its applicability to the formation of participles, and other perfectly general words. In Sanscrit, but not in Greek, we have a combination of the third and first elements, as in *punya-ta-mas* “purest”. The superlative-ending *-τα-τος* is a direct repetition of the third element.

(7) It is more difficult to determine with which of the pronominal endings the termination *-δ-* is to be classed. At first sight it may seem to stand either for the second or for the third element. The simplest form in which it appears is as the last letter of feminine crude-forms, as in *φυγάδ-ς* (*φυγά-ς*), *Ἑλλάδ-ς* (*Ἑλλας*), *λήστριδ-ς* (*λήστρις*), &c. Here it is, according to Bopp (*Vergl. Gramm.* p. 139), merely a secondary, unorganic addition intended as a vehicle for the case-endings, but we believe that in all these cases it is as distinct and significant a pronominal suffix as any other: for instance, why is *λογάδ-ς* not a derivative, if *λεκ-τός* is? In the first and most general of patronymics, *παῖδ-ς*, this ending appears in the shortest form, and also in the patronymic *Θέο-γνιδ-ς* (comp. *Θου-κυδί-δης*). The root of *παῖδ-ς* is that pronunciation of the first tenuis which in all the languages of the Indo-Germanic family is one of the first

sounds uttered by an infant, to express at once one of the first persons whom he sees—his father,—and one of his first wants—food; a similar combination of the mother and the breast is found in the cognate sound *ma*, which is merely a modified utterance of *pa*; or perhaps *ma* is the first sound, and *pa* the second, uttered by an infant. Comp. *πάππας*, *pappa*, “papa”, “pap”, *papulla*, with *μάμα*, *mamma*, “mama”, *μύζειν*, “mouth”, *μαζός*, &c. Combined with the termination expressing an agent we have *πα-τήρ*, *μά-τηρ* in Greek and similar words in all the cognate languages; from the former root with a more general ending we have *πα-οί*=*ἐπικτητοὶ συγγενεῖς*, then *πῶ-λος*, &c. in Greek; *pue-r*, *pu-sus*, *pullus*, *pusillus*, *disci-pulus*, *disci-p-lina*, &c. in Latin, and so on. The termination *δ-* appears in a longer form in the verbal substantives, like *βά-δος*, *χλί-δη*, &c., and in the common patronymics, as *Κρονί-δης*, *Θουκυδί-δης* (the name *Θεοκύδης* occurs in Herod. VIII. 65), &c. In the Æolic dialect this suffix appears as *-διος*, or is combined with the second pronominal ending, which precedes the *-δης* in *Ἀγιάδης* from *Ἄγης*, *Βακχιάδης* from *Βάκχης*, &c. (*Bekkeri Anecd.* p. 634. *ὁ τῶν Αἰολέων ἴδιος τύπος Ὑρράδιος* “Ὑρρα γὰρ παῖς ὁ Πιπτακός”). As some of the female patronymics are formed in the same way as the feminine nouns mentioned above—thus from *Βορέας* we have masc. patr. *Βορεά-δης*, femin. patr. *Βορεάς* (*Βορεάδος*), Soph. *Antig.* 985, from *Τάνταλος* we have masc. patr. *Τανταλίδης*, femin. patr. *Τανταλὶς*=*Τανταλίδς* (*Τανταλίδος*), &c.—we cannot consider the *δ* in the feminine nouns mentioned above as an unorganic fulcrum, and must regard it as the elemental letter of the termination *dă*. In these patronymics the feminine form is shorter than the masculine; in those in *-ίων*=*ιον-s* the converse is observable, the feminine being *-ιώνη*, and *-ῖνη*. The terminations of these patronymics are to be considered as compounds of the second and third pronominal elements *yă* and *nă*. The patronymic ending *dă* seems to be the same element as that contained in *-θεν*, Latin *-tus*, Sanscrit *-thas*, *-dhas*, signifying removal from a place, and used as a sign of the genitive case and to form superlatives. The patronymics in *-ίων*=*ιον-s* must be compared with the perfectly identical comparative-endings (in Greek *-ίων*=*ιον-s*, in Sanscrit *īyas*, *īyañs*, in Latin *-ior*). The superlatives presume one taken of many, the comparative supposes a relation

between two only, but still they are both relative-words. If we suppose a person considered as lower or nearer to us than his father, of course it would be right to speak of him in the comparative degree; when we speak of him as the present term, the nearest to us, the lowest of a series of ancestors, the superlative would of course be the proper degree (see above, p. 205). This distinction is generally, though not always, observed in Greek. The termination *-ίων* would sometimes express the son, *-δης*, or *-ιάδης*, the grandson; thus from *Ἄτρευσ* we have *Ἀτρείων*, *Ἀτρείδης* (Agamemnon or Menelaus, the grandsons of Atreus), thus also we have the forms *Ἰαπετ-ιον-ί-δης* from *Ἰάπετος*, *Ταλα-ιον-ί-δης* from *Τάλαος*, *Ἀκρισιων-ιά-δης* from *Ἀκρίσιος*, &c. It is for this reason that in the names of tribes, supposed to be the present representatives of remote ancestors, we always have *-δῆς* or *-δαι*, never *-ιονες*; for example, the Athenian tribes are called *Ἀργαδῆς*, *Βουτάδαι*, *Εὐπατρίδαι*, &c., and we have clans or castes called *Ὀμηρίδαι*, *Ἀσκληπιάδαι*, &c. The termination *-δεύς*, whence *Ἀργαδῆς*, expresses also general derivation without reference to any proper name, as in the words *ὑιδεύς*, sing. *λεοντιδῆς*, *χηνιδῆς*, plur. The Boeotian patronymics in *-ώνδας* seem to be derived from participial names, as *Χαιρώνδας* from *χαίροντ*, *Χαρώνδας* from *χάροντ*, *Κρεώνδας* from *κρέοντ*, *Ἐπαμεινώνδας* from *ἐπαμύνοντ*. With regard to the last word it is remarkable that the participle which forms the basis of the proper name (*ἀμύνων*, *ἀμείνων*) is itself used as a comparative. This may be taken as a confirmation of our view of the connexion between the comparatives and patronymics in *-ίων=ιον-s*. These are compound suffixes, the first part having a relative, the second a definite or distinctive meaning. In such comparative words as *μέσσος=μέσιος*, *ἄλλος=ἄλιος*, the first part only is used, in the participle, the latter or distinctive, locative part is doubled. When *ἀμείνοντ* came to be used as a comparative, since the participial meaning did not allow the introduction of the relative suffix *ya*, the final *τ* only was dropt to make it analogous, in ending at least, to the other comparatives. When *ὁ ἐπαμείνων* "the assister", originally an epithet, was adopted as a proper name, and consequently became capable of forming a patronymic, the patronymic ending was necessarily not the comparative one in *-ίων*, which would have been opposed to the Greek laws of euphony, but the superlative in *-δας*, which is added to all these

Theban names derived from participles without the insertion of a relative element on account of the resemblance of that participial form to the comparative or relative words in *-ίων*.

We have a long list of adverbs terminating in *-δήν*, which, as Grimm rightly observes (III. p. 239), are to be classed with the Latin in *-im*, *-tim*, and the German in *-ingen*, *-lingen*; thus he compares *βάδην*, *gradatim*; *βλήδην*, *wurflingen*; *συλλήβδην*, *conjunctim*; *γράφδην*, *rixilingen*; *ἁρπάγδην*, *raptim*; *κρύβδην*, *clam*; *δρομάδην*, *lauflingen*; *φυγάδην*, *junctim*; &c. These adverbs sometimes appear under the shorter forms *-δα*, *-δον*, *-δισ*, sometimes under the longer forms *-νδα*, *-νδην*, and *-νθα*, the last however in two instances only, *μίνυνθα* and *ὀλίγυνθα*. We occasionally find nearly all these terminations appended to the same root, as *κρύβδα*, *κρυφηδόν*, *κρυφάδισ*, *κρύβδην*, *κρυφανδόν*. Buttmann (*Lexil.* I. p. 16) regards these as accusatives feminine, used as adverbs like *ἀκὴν*, *ἀπριάτην*; but although the old locative case, which he calls an accusative, may be used as an adverb or preposition, and though, as we have seen, nouns are formed by the suffix *-δη*, *-δος*, yet the absence of any nominative in all the adverbs in question, and the way in which the suffix is attached to the root, forbid us to consider them in that light. We have seen that the suffix *-δε* implies motion to a place, as in *οἶκον-δε*, *Οὐλύμπων-δε*, and that it is connected in meaning and origin with the patronymic termination *-δης*, *-δ-s*, and the suffix *-θεν*, Sanscrit *-dhas*, Latin *-tus*, the difference between *οἶκο-θεν* and *οἶκον-δε*, for instance, being that although *-δε* and *θεν* are originally identical, and both signify motion from a place (*hin*), yet, by the accusative *ν*, introduced into the latter word, the idea of *going* is changed into that of *coming* (*her*). It will be remembered that there is no absolute distinction of *hin* and *her* in the Greek verbs of motion, and that *έρχομαι* signifies “I go” as well as “I come”. A careful examination of all the adverbs now under consideration would convince us that the meaning which they convey, whether they are more immediately connected with nouns or with verbs, is simply that which would be produced by the suffix *-θεν*, or the patronymic suffix *-δης*, *-δ-s*, that, namely, of proceeding from, being deduced from, caused by, in the manner of, &c. Thus, to take those formed from nouns, *κλαγγη-δόν* is equivalent to *κλάγγηθεν*, *καναχηδὰ* to *κανάχηθεν*, &c. To discuss those

formed from verbs, we must first consider what would be the meaning of a noun formed from a verb root by the suffix *-δης*, *-δ-s*. Thus, from the root *βα-* "to go", we have *βά-δος* "a going", also *βά-δι-σις*, &c., and *ἔμ-βα(δ)ς* "a shoe": from *φυγ-* "to fly" we have *φυγή*, "flight" or "flying", but *φύγα(δ)ς* "a flier", so that these words express that which comes out of the action of the verb, i.e. the manner of it. Just such a meaning we have in the adverbs *βά-δην*, *ἔμ-βα-δόν*, *φύγ-δα*. The forms *-δον*, *-δα*, *-δην*, differ only as *τυπτόμεθον*, *τυπτόμεθα*, *τύπτετον*, *τυπτέτην*, in the verbs, which we shall hereafter show were originally identical. The forms in *-νδα*, *-νδην*, are analogous to the terminations in *-ντ*. The two in *-νθα* must be compared with *ἐνθα*, *ἐνθεν*.

It is well known that these adverbs are not formed from verbs which take a *σ* in their derivatives, with the exception *βύζην*, *βυζόν*, from *βύω*, *βύ-σδω* (Buttmann, *Ausführl. Sprl.* § 119, 83). From verbs of this kind we have generally adverbs in *-στι*, as *ὄνομα-στί* from *ὀνομά-ζω*. This form is most particularly common in connexion with verbs in *-ι-ζω* (*ι-σδω*), as *ἑλλην-ί-ζω*, *ἑλλην-ι-στί*, *ἀνδραποδ-ί-ζω*, *ἀνδραποδ-ι-στί*, &c. In some of these adverbs *κ* is substituted for *σ*, on the same euphonical ground which has produced such forms as *βαστα-κ-της* from *βαστά-ζω*, though from *κτί-ζω* we have *κτί-στης*, and *ἐδη-τύς* by the side of *ἐδέστης*, though we have *ὄρχηστύς*, *ὄρχήστης*, *σωφρονιστύς*, *σωφρονίστης*, and conversely both *ἐπητύς* and *ἐπήτης* (see Lobeck, *Paralipom.* p. 19). According to this principle, we have *ἄστα-κ-τί* from *στά-ζω*, and *ἄνοιμω-κτί* from *οἰμώ-ζω* (Hermann, *ad Soph. Aj.* 1206). It will be remarked, however, that most of these verbs have *γ* or *κ* in the noun-derivatives, as *στενα-ζω*, *στένα-γ-μα*, not *στένα-σ-μα*, *ἄστενακτί*; *κηρύσσω*, *κήρυξ*, *κήρυ-γ-μα*, *ἄκηρυ-κτί*; *οἰμώ-ζω*, *οἰμωγή*, *ἄνοιμω-κτί*; *στα-ζω*, *στάζω*, *στάγμα*, *ἄστακτί*; and the truer account undoubtedly is, that the *ζ* of the indicative is a representative of *γγ* or *κγ*¹. Many adverbs of this class have neither *σ* nor *κ* before the *-τι*, as *ἀμελλητί*, *ἀμεταστρεπτί*, *ἀνιδρυτί*, &c., especially when the root terminates with *ρ*, as *ἄρ-τι*, *ἐγρηγορ-τί*, *ἐγερ-τί*, &c. These terminations belong originally to the same class with those which we have just discussed; namely, to the verbals in *-τις*, *-τυς*, *-τεος*.

1. Above p. 288 foll.

They are all locative cases, and bear the same relation to the Latin locatives in *-tim*, that the ordinary locatives in *i* do to the older locatives in *-iv*, *-im* (see above p. 215). Those in *-ωστί*, as *μεγαλωστί*, *δημιωστί*, *ιερωστί*, *νεωστί*, &c., are very singular forms; they are in fact an union of the old ablative in *-ως* with this locative suffix, an union similar to that which we have pointed out in *οἶκον-δε*, *βουλύτον-δε*, &c.; another similar form is the Latin *catervâ-tim*. Besides these locatives with the suffix *-τι*, *-κ-τι*, *-σ-τι*, from verbs, a great number of adverbs appear as the immediate locative cases of nouns, with the ending *ει* or *ι*; thus we have *ἄμ-ισθί*, *αὐτοβοεί*, *πανδημεί*, *ἄμαχεί*, &c. It appears quite impossible to settle the orthography of these endings. Blomfield (*ad Æsch. Prom.* 216) would write *-ì* in all those to which there are corresponding nouns in *-os*, on the analogy of *οἴκοι*, *πεδοῖ*, &c.; and *-ει* in the others. But the traditionary orthography on which the varieties depend is too consistent to admit of any such alteration; nothing is to be inferred from the analogy of *οἴκοι*, for *οἴκει* is recognized as a genuine form by Theognostus, and the Dorians wrote *τουτεῖ*, *τηνεῖ*, *αὐτεῖ*, *ἐκεῖ*, as general locatives, without any particular expression of gender (*Bekkeri Anecd.* p. 1404). The variation in the orthography and also in the quantity of these endings (*Bekkeri Anecd.* p. 571; *Gramm. ap. Hermann. de Emend. Rat. Gr. Gr.* p. 448) must be reckoned under those anomalies which are due only to caprice and accident, and which are so numerous as to defy all the Procrustean efforts of the Porsonian school. With these locatives in *ει*, *ι*, we must of course class those in *αι*, as *χαμαί*, *πάλαι*, *παραί*, &c. We have also older locative forms in *-ν* corresponding to these adverbs, comp. *αἰέν*, *αἰεί*; sometimes even *αἰές*, comp. *-θεν*, *-θες*, *-tus*, *-dhas*, *πάλιν*, *πάλι*, *πάλαι*; *πρίν*, *πρό* (*δεῦρο*, *ἐτύπτετο*), *περί*, *πέραν*, *πέρα*, *πάραι*, *πρῶϊ*, *παρά*, &c. The forms in *-η* belong also to this class, for in the Bœotian dialect *μή*, *νή*, *ἐπειδή*, &c., were written *μεί*, *νεί*, *ἐπιδεί*, &c. (*Böckh, Corp. Inscript.* I. p. 720). So that, on the whole, strange as it may appear, we are compelled to admit an original identity of terminations apparently so different as *-ον*, *-ην*, *-ο* (compare the secondary person-ending of the passive voice *-μην*, *-σο*, *-το*, &c.), *-ι*, *-ῑ*, *-ιν*, *-ει*, *-αι*, *-η*, *-ες*. To such a distance from an original form in the ending word will the arbitrary or accidental diver-

gencies of human utterance lead those who speak the same language! or shall we say that the principle of association, working and fermenting in the mind, had generated these by-forms in language to preserve in the outward symbols of thought the idea of likeness in dissimilarity?

To return, however, to the suffix *dă*. We have before shown, on more than one occasion, that, in spite of the obvious suggestion of a simple change of the *tenuis* into the *medial*, this element is not a representative of the third pronominal stem *ta*, but a shortened form of that word which appears as the second personal pronoun and the second numeral. The nature of the present researches and the wide field in which they are carried on, does not allow us to bring forward all our proofs at once; we are now, however, enabled to set forth with additional confirmation, some of the statements which we made in the preceding chapters. It appears from the investigation which we have just concluded, that there is an obvious connexion between the termination *-της*, expressing agency, the patronymic *δη-s*, where the *η* includes *y* as in the passive aorist *ἐτύπην* (comp. the Æolic patronymics in *-διος*, also *δῆ-λος* for *δείε-λος*, *δγαλος* "as clear as day"), the adverbial terminations in *-δον*, *-δην*, *-δα*, *-θα*, *-τι*, *-tim*, *-dis*, and the verbals *-δος*, *-δη*, *-τυς*, *-τέος*. We have before pointed out the identity of *-θεν*, *-θες*, with the ablative *-d* or *-t*, the superlative *-τος*, and the patronymic *-δης*. The adjectives in *-διος*, which generally express immediate proximity in space (Lobeck, *Phryn.* p. 555 foll.), evidently belong to this class, as does also the Slavonic ending *dje*, *de*, or *dû* (Bopp, *Vergl. Gramm.* p. 394). There is only one common ground on which all these forms can meet, namely, the element used for the second personal pronoun, *ta-va*, *dva*, *dya*, or *tha*; and one or other of these natural varieties seems to be represented by every one of the above suffixes, which in meaning and use seem to be equivalent. The Greek *θ* is a softened *δ* almost verging upon *y* or *j*. It is found where *y* appears in Sanscrit, and in some cases it seems to be equivalent to *ζ*, which is either *σδ*, or *y* with a guttural or dental prefixed: compare *Ζεύς*, *θεός*, *διός*, *αἰζήνός*, *ἡΐθεος*; *χθι-ζός* for *χθί-διος*; *μέτα-ζε* with *θέν*, &c. In the terminations *-τύς*, *-τέος* (for *τεFος*), the original parts of the compound *ta-va* are more clearly discerned, the *va* being vocalized in the former. In the

endings $-\tau\iota$, $-tim$, the i is the only representative of the additional element by which in these cases the second pronoun is distinguished from the third. In general, it may be laid down that the appearance of either i or u in a syllable is the representative of some lost element. These letters, as we have taken some pains to show, are the ultimate vocalization of certain consonants and not simple articulation-vowels, like a and its lighter forms e , o . We have seen that i sometimes stands as the sole representative, not merely of u , but even of the digamma or a compound of the guttural and labial. It is this letter alone which is left to distinguish $\tau\iota s$, the corrupted Hellenic form of the interrogative and indefinite, from the common pronoun of the third person, and it is also this which alone remains in $-tim$, $-\tau\iota s$, as u alone remains in $-\tau u s$, to mark that they belong to the second pronoun. A similar remark may be made with regard to η . But although this evidence must induce us in almost all cases to class $-d\tilde{a}$ with the terminations formed from the second pronoun, and to distinguish it carefully from those formed from the third, it must be confessed that certain perplexities remain which it is very difficult to unravel. It is clear from the sense that the Latin verbal in $-n-dus$ must be compared with the Greek verbal in $-\tau\acute{\epsilon}o s$. But then we have active participles *oriundus*, *amabundus*, which seem to differ from *orien(t)s*, *aman(t)s*, only as *quantus* from $\pi\alpha\nu\tau-s$, or *Tarentum* from $T\acute{\alpha}\rho\alpha\nu\tau-s$. Again, *cupi-dus* appears as a synonym for *cupien(t)s*, and *rapi-dus* on the contrary for *rap-tus*; the forms *splendi-dus*, *can-di-dus*, which have reduplicated endings, appear to be equivalent to *ple-nus* or *ple-tus*, and *ca-nus* or *ca-tus*. In these cases, as in the confusion between the verbal in $-tu-s$ (or supine), and the passive participle in $-tus$, which appear to be of different origin, we must be content to say that time and custom have produced identities where we should have guessed that there must have been originally a difference, even without the resources of comparative philology to tell us what that difference was. We are not without other examples of the same sort of confusion, which is always troublesome and perplexing. Thus, va another form of ma , is to be distinguished from va a mutilation of Fa : pa , another form of ma , must be distinguished from pa , another mutilation of the same $Fa = kpa$; and $\tau\iota s$, the interrogative and indefinite, which seems to be a corruption of $\kappa\pi\iota s$ or $F\iota s$, must

be distinguished from the termination *-τις* (*τεος, τυς*), which is the relict of a compound of *ta* and *va*. We have also mentioned the different syllables to which the Greek *η* corresponds (above p. 131, 181, &c.). This *da* being the ultimate form of the compound *ta-va*, we shall not be surprised to see it combined with the more original and simple form of the second pronominal stem, in *-ιά-δης, -δο-πός* (*ἐχθο-δο-πός*), &c. Its appearance in composition with the element *-na* is perfectly analagous to the compound terminations *-μο-νη, -μω-ν, -συ-νη, -συ-νος*. Thus we have *ἀλγην-δών, ἀχθην-δών, κοτυλη-δών*, &c. to many of which adjectives in *δα-νός* correspond: as *τηκε-δών, τηκε-δα-νός*, but of course there are many adjectives in *-δανός*,—*οὔτι-δα-νος* for instance—which have no corresponding substantive in *-δών*. A long series of Latin words in *do(n)-, dinis*, may be classed with the Greek nouns in *-δών*: the Latin termination seems to have the same force as the Greek; compare *grave-do(n)* with *ἀχθην-δών*, &c. In Greek, *-δανός, δών*, appear to be sometimes equivalent to one another and to *-της*; thus we have *μακε-δνός, μακε-δών*, and *μακέ-της* as synonyms.

(8) There are two terminations of most extensive use *-λος, -ρος*, which it is difficult to distinguish. The former is found in a number of adjectives expressing qualities, as *τυφ-λός, δει-λός, στυφ-λός, μεγά-λος*, or substantives denoting things of a certain kind, as *κρότα-λον, θυμέ-λη, νεφέ-λη*: sometimes under a longer form, as *σμερδα-λέος, λευγα-λέος, νηφά-λιος, δαιτα-λε-ύ-ς*, sometimes compounded with the element *-μος* as in *πευκά-λι-μος*, sometimes with the element *-κος* as in *ἡ-λεκ-ς* (*ἡλιξ*), *τή-λι-κος*, &c. In Latin it presents itself in all these forms and some others; thus we have *tremu-lus, faci-lis, vincu-lum, scapu-la, fi-lius*, (*Φιός, φύ-ειν*), *fe-li-c-s* (*felix*), *fame-li-cus, opu-le-n-t-us*, &c. The compound endings *-λικος, -licus* have been preserved in the Gothic and German languages, and even in modern English. Thus in *leiks* = Engl. “like”, from a verb signifying “to see”: *hwé-leiks* is “what like”, German *we-l-cher*, compare *so-l-cher* “so-like”, “su-ch.” The Gothic *ga-leiks*, German *gleich*, is to be compared with the Sanscrit *sa-drīṣas*, compare *σά-φης* from *σύν* (*σα-μα*) and *φῶς* (above p. 183).

The termination *-ρος* seems to be nearly equivalent in value to *-λος*. Compare *σκλη-ρός* with *στυφ-λός, λευγα-λέος* with

λυγ-ρός, μακ-ρός with μεγά-λος, &c., δῶ-ρον with κρότα-λον, &c. The Latin words *cla-rus*, *glo-ria* (κλε-), *prima-rius*, *hila-ris*, exhibit correspondences to all the simple forms of -λος. In the compound endings the coincidences are still more striking; compare *ficu-l-nus*, &c. with *hodie-r-nus*, &c. *doct-rī-na*, *text-rī-na*, &c. with *canti-lēna*, *stercu-li-num*, &c., *simula-c-rum* with *peri-c-lum*, &c., and in regard to the compound λι-κος we may observe that the Greek and Sanscrit have with the same meaning δέρκω (ἑ-δρακον), -d-rīç, where the *d* is one of those prefixes, probably pronominal, which so often appear before simple roots: compare δάκρυ with the Sanscrit *açru*, Lithuanian *aszara*.

In fact there can be no doubt that -λος, -ρος are etymologically identical, the latter being only a modernization of the former, as is so often the case; compare *cresco*, *glisco*; *celeber*, *creber*; *apostolus*, *apôtre*, &c. (see above p. 111). The very same word with modified meanings presents both endings. Thus we have both ποικί-λος and πικ-ρός, from the same root πικ- "to pierce." It will be remembered that ποικίλος and στικ-τός and even ποικιλό-στικτος are synonyms: the root στιγ- like πικ- means "to pierce" (see Buttmann, *Lexil.* I. p. 18). Πικρός seems to have its proper meaning in Soph. *Ajac.* 1024.

πῶς σ' ἀποσπάσω πικροῦ
τοῦδ' αἰόλου κνώδοντος.

But though it is pretty obvious that -λος and -ρος contain the same root it is not quite so clear what that root is. The intensive particle ῥα which belongs to the same family seems to convey the idea of facility, easy motion, and so forth. We have accordingly recognized its connexion with ῥέ-ειν, ῥά-διος, &c. Now there are two Sanscrit roots with the same meaning *ri* and *srī* both signifying "to go." We do not conceive that the sibilant prefixed to the second interferes with its relationship to the first. The present of *srī* is *sarāmi* = *adeo aliquem*. This word is of course related to *de-serere*, *saliré*. We consider too that *conserere* and *consulere* are the same word. "Without doubt", says Niebuhr (*Hist. of Rome* I. p. 512), "the name *consules* means nothing more than simply *collegues*: the syllable *sul* is found in *præsul* and *exsul*, where it signifies *one who is*: thus *consules* is tantamount to *consentes*, the name given to Jupiter's counsel of gods." This is not altogether accurate:

the word *consentes* means "those who *are* together" (compare *ab-sentes*, *præ-sentes*): *consules* "those who *go* together," *præ-sul* "he who *goes* before," *exsul* "he who *goes* out." If *sa-li-re* and *se-re-re* are the same words, *li* and *re* must be the same root, and therefore *lev-is* and *rap-idus* are connected. The former is the root λει in Greek, which we shall show in a future chapter in all its various uses. It signifies both "to see" and "to take"; from the former meaning is derived the use of -λι-κος and δ-ρ(ι)κω; from the latter that of ῥά, *rap-io*, *rap-idus*, and *lev-is*, *lev-are*. We may also compare Sanscrit *vrīkas* (Sabine *hirpus* = *virpus* or *vripus* or *irpus*, Lithuan. *wilkas*, Latin *lūpus*, Goth. *vulfs*) with the Greek λυ-κος, the connexion of which with λειν-κός = λει-κός, λυκή, *lux*, λυκάβας and the root λει "to see," is well known. Thus the old difficulty about Apollo's epithet λυκεῖος vanishes at once. If these views are well founded there is no longer any doubt of the identity of the compound endings τρ-, θρ-, τλ-, -θλ-.

There are no pronominal roots *ra* or *la*: *ille* and *alius*, ἄλλος, are due to a very complicated process of assimilation. Accordingly, the words ending with those elements cannot be considered in any other light than as compound words. The verbal root, however, which enters into them is of such simplicity, and sends forth so many ramifications throughout the whole body of the Indo-Germanic languages, and besides, though not a pronoun, is so applicable to all the uses of a pronominal element, that we have thought it right, as well in treating of the pronominal particles as in this place, to class it with the organizing elements of the Greek language, to treat it, in fact, as a constant. In a future chapter we shall discuss at length its various uses and powers as a verbal root.

The collective termination -ων is probably of the same origin as the genitive-plural ending.

CHAPTER IV.

NOUNS USED AS PREPOSITIONS.

THERE are three words, evidently cases of substantives, which are used in much the same way as prepositions, that is, they are employed in connexion with the genitive case, or, in common language, they govern that case. These words are (1) *ἐνεκα* or *ἐκατι*, (2) *χάριν*, and (3) *δίκην*. As these quasi-prepositions have a sort of connexion with one another, and the two first belong, each of them, to an extensive family of words which has not been sufficiently explained, we shall devote a separate chapter to their consideration.

(1) It is generally laid down that *ἐνεκα* signifies “on account of”, “for the sake of”; but it is proper to state that the genitive case, with which *ἐνεκα* is generally found, may stand alone with the same signification as when Thucydides says (I. 4) that Minos cleared the Ægean sea of pirates as far as he could *τοῦ τὰς προσόδους μᾶλλον ἵεναι αὐτῷ*, and also that the genitive case may be accompanied by some preposition conveying a similar meaning, or by *χάριν*: as will appear from the following passages: Sophocles, *Philoctet.* 554,

ἀ τοῖσιν Ἀργείοισιν ἀμφὶ σοῦ ἕνεκα
βουλεύματ' ἐστί.

Thucydides, VIII. 92, καὶ ὁ μὲν Θηραμένης ἐλθὼν ἐς τὸν Πειραιᾶ ... ὅσον καὶ ἀπὸ βοῆς ἐνεκα ὠργίζετο τοῖς ὀπλίταις· ὁ δὲ Ἀρίσταρχος καὶ οἱ ἐναντίοι τῷ πλήθει (read τῷ ἀλήθει) ἐχάλεπαινον. Xenophon, *Hellenic.* II. 4. § 31, πέμπων δὲ πρέσβεις ὁ Πανσανίας πρὸς τοὺς ἐν Πειραιεῖ ἐκέλευεν ἀπιέναι ἐπὶ τὰ ἑαυτῶν· ἐπεὶ δ' οὐκ ἐπείθοντο, προσέβαλλεν ὅσον ἀπὸ βοῆς ἐνεκεν, ὅπως μὴ δῆλος εἴη εὐμενὴς αὐτοῖς ὢν. Lysias *de Evandri probatione*, p. 176, ὁ θεὸς τὸν περὶ τῶν δοκιμασιῶν νόμον οὐχ ἡκιστα περὶ τῶν ἐν ὀλιγαρχίᾳ ἀρξάντων ἐνεκεν ἔθηκεν. Plato, *Politicus*, p. 302 B, οὐ μὲν ἄλλ' εἰς γε τὸ ὅλον ἴσως ἀπανθ' ἐνεκα τοῦ τοιούτου πάντες δρῶμεν χάριν. Legg. III. p. 701 D, ἀλλ' ἐπανερωτᾶν τὸ νῦν δὴ λεχθέν, τὸ τίνος δὴ χάριν ἐνεκα ταῦτα ἐλέχθη. In Aristophanes, *Thesmoph.* 372,

ἡ Μήδους ἐπάγουσι τῆς
χώρας οὐνέκ' ἐπὶ βλάβῃ,

it is probable that the last three words are a mere repetition of those in v. 367, κερδῶν οὐνέκ' ἐπὶ βλάβῃ. We think, however, that it is unnecessary to place them between brackets, as Dindorf has done. In the other passages it is easy to show that ἐνεκα is neither superfluous nor insignificant. The phrase ὅσον ἀπὸ βοῆς ἐνεκα, used by Thucydides and Xenophon, is probably a military expression: for a Greek battle generally began with a shout, and if the parties did not go farther than that, it was of course only a sham-fight. And thus Xenophon says that Pausanias attacked the Peiræus *merely* so far as shouting went: he made a false attack: and Thucydides states that whereas Aristarchus and the young oligarchs who accompanied him were *sincerely* indignant (we read either τῷ ἀλήθει or τῷ πλήθει τῷ ἀλήθει, the latter having been merged in the former from its similarity of appearance), Theramenes *only* affected to condemn the conduct of the soldiers,—ὅσον ἀπὸ βοῆς ἐνεκα ὠργίζετο, he showed his anger only so far as making an outcry went. In these two passages, then, ἐνεκα clearly means “only”. In all the other instances of alleged pleonasm the signification obviously is “especially”, “in particular”. Indeed, it is not unlikely that, in the passage of Lysias, we should bracket not περί, as Bekker has done, but οὐχ ἡκιστα which seems to be a gloss upon ἐνεκεν. The etymological analysis, which we shall now attempt, will show us that both these adverbial meanings “only” and “especially” are included among the primitive significations of ἐνεκα.

The relationship between ἐνεκα and ἐκατι or ἐκητι, as it is written in the Ionic dialect, is the same as that which subsists between the Italian synonyms *in fuori* and *fuori*, which are used indifferently as prepositions signifying “without”. Ἐκατι, the older word, has the complete case-ending and is used without the preposition ἐν which supplied the place of the locative in the more recent language: ἐνεκα contains the preposition ἐν prefixed to a mutilated locative of ἐκας. The formation of ἐνεκα=ἐν ἐκα is perfectly analogous to that of ἐναντα=ἐν ἄντα. In ἐνεκα the aspirate of the noun has been transferred to the beginning of the word according to a principle mentioned before, and of which

the Greek language furnishes many examples: thus ὁ πρὸ ὁδοῦ makes φρουῶδος, and ὁ πρὸ ὁρῶν, φρουρός. Indeed, it would be absolutely necessary that when ἐν ἑκα became a single word, the aspirate should be so transposed, for the analogies of Hellenism do not permit an aspirated vowel any where but in the first syllable, and it is remarked as a strange peculiarity of the Athenians that they said ταῶς instead of ταῷς—φίλαρχος γὰρ οὔσα καὶ ἡγεμονικὴ τὴν φύσιν ἢ δασύτης τοῖς τελευταίοις μέρεσι τῶν ὀνομάτων οὐδαμῶς ἐγκαθείργνυται (Athenæus p. 397 F). We find a similar transfer even in the case of aspirated consonants: as in τρέφω, θρέψω; ἔχω, ἔξω, &c. From these instances, and from mere crases like θοιμάτιον for τὸ ἱμάτιον we must distinguish (1) those in which it appears uncertain whether there is a transfer of the aspirate or not, as in τέθριππον from τετρα- and ἵππος, (2) those in which the aspiration seems to result merely from a contact with the ρ, as in θράσσω for τaráσσω, and (3) those words (like θόρυβος compared with τύρβη, θρέομαι with τρέω, and θρύπτω and θραύω with τρυφή, and τρύω) in which the aspirate seems to result merely from a kind of vacillation and uncertainty of use (see above, pp. 128, 135). Ἑκα as a mutilated though old form of the dative or locative may be compared with λίπα in the phrase χρίειν λίπ' ἐλαίῳ, where ἔλαιος is a regular adjective from ἐλάα and λίπα ἔλαιον signifies "olive oil" (Buttmann, *Ausführl. Sprl.* Vol. I. p. 229). But we have the proper ending of the locative in the form ἐνεκεν, which is often used even in the more recent Attic writers: compare κα, κεν; ἐνθα, ἐνθεν; ἔπειτα, ἔπειτεν; πρόσθα, πρόσθεν, &c.

The element ἑκα, which is the essential part of the synonyms ἑκατι, and ἐνεκα, occurs also in the following words; ἐκάβη, ἑκας, ἑκαθεν, ἐκάλη, ἐκαμήδη, ἑκαστος, ἐκάτερος, ἐκάτη, ἑκατος, ἑκηλος and ἐκῶν, besides a great number of derivatives, as ἐκάεργος, ἐκατη-βόλος, ἐκη-βόλος, &c. To classify these words we will first set apart the proper names Ἑκάβη, Ἑκάλη, and Ἑκαμήδη. The remaining words are a substantive ἑκας, genit. ἑκαθεν, dat. ἑκα or ἑκεν found in ἐνεκ(^α_{εν}), with which are connected the two adjectives ἑκα-τος (fem. ἐκάτη), and ἐκῶν (ἐκό-ντ-ς); the comparative and superlative ἐκά-τερος, ἑκασ-τος; and the dative ἑκητι of a substantive ἐκης (ἐκ-γα-τ-ς) no longer in existence, by the side of which we have the adjective ἑκηλος. Such is

obviously the proper grammatical classification of this set of words, so far as regards the forms. We must now investigate their significations. Ἐκας, which is used as an adverb, denotes distance, whether in space or time; as καὶ σὺ οὐχ ἕκας πού (Sophocl. *Philoct.* 41), "he is not far off"; οὐκ ἕκας χρόνου πάρεσται (Herodot. VIII. 144), "he will be here at no distant period." The word belongs to the oldest state of the language. An old grammarian under the head ποῖαι γλῶσσαι κατὰ πόλεις remarks Θεσσαλῶν—ἐκάς. πόρρω (*Bekkeri Anecd.* p. 1095 note), which is much the same as calling it a Pelasgian word (Niebuhr, *Hist. of Rome*, I. p. 30, note 69). Ἐκαθεν generally means "from, or of, that which is distant": it may be used as a synonym for ἕκας (Homer *Odyss.* xvii. 25, ἕκαθεν δέ τε ἄστυ φάτ' εἶναι), as the genitive of other words is also used to denote locality. The idea of distance is also conveyed by Ἐκατος, Ἐκάτη, which are epithets of the Sun and Moon, the two *distant* powers (*Theatre of the Greeks*, 4th edition, p. 14), and by the epithets ἐκά-εργος, ἐκατη-βόλος especially applied to them. The numeral ἐκατὸν has no real connexion with these words, as may be seen by the accentuation; we have shown before that it belongs to entirely a different class of words. The idea of distance has passed into that of separation in the words ἐκά-τερος, "one of two", ἕκαστος, "one by himself out of many"; the latter is analogous to ὀλιγοσ-τός, πολλοσ-τός, of which we have spoken before. We have a still further modification in ἐκῶν, ἔκηλος, which imply, acting by oneself, without interference on the part of any other person, acting according to one's own will and pleasure, doing any thing of one's own accord, without consulting or being influenced by any other person. Of the two adjectives ἐκῶν refers rather to the free-will of the agent, ἔκηλος to his freedom from disturbance and consequent pleasure and quiet. Yet both of them equally convey the idea that the person described is some one by himself, that is, considered without reference to any one else. Hence ἐκῶν is particularly opposed to βία, as in Sophocles, *Æd. Col.* 939, βία τε κούχ' ἐκῶν, and it is used in speaking of errors which men have committed with a full knowledge of the consequences, as when Prometheus says (*Æschyl. Prom.* 265),

ἐγὼ δὲ ταῦθ' ἅπαντ' ἠπιστάμην
ἐκῶν, ἐκῶν ἡμαρτον οὐκ ἀρνήσομαι.

In the phrase ἔκων εἶναι, this adjective points still more directly to the independent agency, as in Herodotus, VII. 164, ἐκῶν τε εἶναι καὶ δεινοῦ ἐπιόντος οὐδενός, so that the phrase is nearly equivalent to the Atticism τὸ ἐπὶ σφᾶς εἶναι (Thucyd. IV. 28). Ἐκηλος generally implies uninterrupted rest and quietness, the results of non-interference from without. We have already explained the principle according to which εὐκηλος is only a by-form of ἔκηλος (above p. 130): it is expressly stated by Apollonius (*Bekkeri Anecd.* p. 558) that εὐκηλος is related to ἔκηλος in the same way as εὐτε to ὅτε. Homer invariably uses ἔκητι in connexion with the name of some divinity, to express that the action in question has been effected by the aid or special favour of the protecting power. Thus *Odyss.* xx. 42, Ulysses, addressing Minerva, asks,

εἴπερ γὰρ κτείναιμι, Διὸς τε σέθεν τε ἔκητι,
πῇ κεν ὑπεκπροφύγοιμι;

It is used in this sense by Pindar, e. g. *Pyth.* V. 9, ἔκατι χρυσαρμάτου Κάστορος, or as expressing human agency, as in the old proverb, ἔκητι Συλοσῶντος εὐρυχωρίη, "room enough, thanks to Syloson" (Strabo, p. 638), and finally, which is much the more common usage, as a synonym for ἔνεκα, whether as signifying "by means of", "on account of", "for the sake of" (*propter*), as in Pindar, *Pyth.* X. 58, ἔκατι στεφάνων θαητὸν ἐν ἄλιξι θησέμεν ἐν καὶ παλαιτέροις, or with the meaning "as far as", "in regard to" (*quoad*), as in Æschylus, *Pers.* 343, πλήθους μὲν ἂν σάφ' ἴσθ' ἔκατι βαρβάρους ναυσὶν κρατῆσαι—"if it had depended *only* on the number of their ships, the Persians would no doubt have gained the victory."

We have now considered all the simple words into which ἔκα- enters, and it appears that there are only three meanings, distance or separation, will, and unity. It is, we conceive, easy to show that these are only modifications of one and the same idea. And first, the ideas of separation, distance, and unity are identical. That which is absolutely distant or separated is said to be *alone*, i. e. all one: and thus the first numeral is expressed either by the pronominal element *ma*, denoting the subject as opposed to the object, or by some pronoun *é-na* (*unus*), or *é-ka*, which combines the idea of definite locality with that of distance. Again, the idea of will is immediately derived from

that of self. A man's personality, individuality, or character, depends upon his will, as Schiller says (*Wallensteins Tod*, IV. 8), "den Menschen macht sein *Wille* gross und klein", or rather the will and the character are the same, for, as Novalis remarks, "a character is a completely fashioned will" (ein Character ist ein vollkommen gebildeter *Wille*, II. p. 284). Now the very idea of a distinct person or individual is that he cannot be divided, that he is an unit; hence Paschasius rightly asserts—*in Deo et homine, gemina quidem substantia, sed non gemina persona est, quia persona personam consumere potest, substantia vero substantiam consumere non potest* (quoted by Hooker, Vol. II. p. 288, Keble). So that the meanings,—“separation” or “distance” conveyed by ἕκας, ἕκατος, and “will” borne by ἕκων and ἕκηλος, as well as the sense “only” or “especially”, which we have extracted from ἔνεκα in the cases of alleged pleonasm quoted above, are all derivable from that of “unity”, which is the meaning of ἐκάτερος, ἕκαστος. Ἐνεκα and ἕκατι, in the ordinary use, bear all these modified but nearly connected significations.

Comparative grammar shows us that the element ἑ-κα- is, in fact, identical with that compound of two pronominal stems which forms the first Sanscrit numeral *é-ka-s*, and the Latin adjective *æ-quu-s*, denoting unity or sameness. The identity of ἑ and é is established by a comparison of *dévas* with θεός, &c., and by the frequent metathesis of the semivowels. It happens in some cases that a class of words containing a common element preserve their external resemblance more completely in Greek than in Sanscrit, although the changes which the root has undergone may be greater in the former than in the latter language. This is one of those cases: for, although the element ἑκα originally began with a labial, as appears from the fact that all words containing this root are digammated, and from the by-form εὔκηλος, they have in every other instance been consistent in the change to the aspirate, or in the suppression of the labial element; whereas the Sanscrit has merely transposed the guttural semivowel in the numeral *é-ka-s* = *ai-ka-s*, and has retained the labial only in *vaç-mi*, “I will”, *vaças*, “will or power”, *a-vaças*, “unwilling”, *a-vaç-yam*, “by compulsion”. The ablative *vaçât* of *vaças* is used to signify “on account of”, just like ἕκατι. After what has been said about the semivowels

in a former chapter, we shall have little difficulty in admitting the relationship of these Sanscrit words denoting "will" to the first numeral in that language. This presumes, however, that the first part of the compound now before us is the element **Fa** = *hva*, denoting relative nearness. It is true that all the applications of *é-ka*, *é-ka*, would induce us to suppose that the first syllable is a strong form of the demonstrative derived by vocalization from *ma* = *va*, the first pronominal element (above pp. 164, 187, 272), and this creates some embarrassment. The noun *ávaξ*, anciently pronounced **Fávaξ**, which, as we shall see, is derived from the preposition *á-va*, does not present the same difficulty; for there is no appearance of an aspirate in this word or its derivatives, and, although the digamma in its oldest and proper form is a combination of the guttural and labial, yet there are words to which it is said to have been prefixed in Homer, where, however, there was never any thing but a labial, and we often use the sign **F** in these pages to mark that a labial only is wanting, in conformity with the custom of other writers on these subjects. **Fávaξ**, therefore, is derived from **Fa-va**, the older and more correct form of *á-va*. In *é-γώ*, *ά-γαν*, *aham*, which appear to be connected in meaning with the first Sanscrit numeral, the first element appears without any aspirate. That the aspirate or ultimate guttural, however, was really an essential part of the first syllable of this element, appears from the Latin *secus*, which is clearly the representative of *ékas*. We are obliged to infer, then, that although *é-γώ*, *ά-γαν*, *a-ham*, &c., seem to be derived from the most emphatic demonstrative, implying distance or separation, and though *ékas*, &c., bear the same or a very similar sense, the latter set of words are connected in their first syllable with the second pronominal element, and signify "this which", whereas the former and *á-va* are related in their first syllable to the strong demonstrative, and signify "that which". Farther than this we cannot maintain the connexion of the first Sanscrit numeral and *éka*- with the nominative of the first personal pronoun: for, however nearly they may approach to one another in meaning, it is impossible that the different elements *é-*, *ai-*, *se-*, *æ-*, *va*, *év*, should have any other common origin than the element **Fa**. And thus the simplest demonstrative root *a*, though in all its appearances it seems to correspond in *value* to the element of the first person, must

in this instance be connected in *origin* with the element of the second, the idea of proximity to, having merged in that of identity with, the subject, as in the Italian *ci* mentioned above (p. 180). The etymological fact is certain; the explanation depends upon the exclusively demonstrative nature of the original pronouns. There is, in fact, no reason why the ideas of separation, distance, and unity should not be expressed by the combination, signifying "this which", as well as by one denoting "that which": especially as the demonstrative in the second case is merely a mutilation of the first personal pronoun.

It will perhaps be as well to explain the three proper names into which the element *έκα* enters. *Έκάβη* means either an only child, or one born among the last of her father's family; in either case it is a title of endearment. With regard to the first part, it may be compared with *τηλύ-γετος*, or the Sanscrit *éka-ja* = *qui solus natus est* (Bopp, *Gloss. Sanscr.* p. 38): its termination seems to be analogous to that of *λυκά-βας*. The name *Έκάλη* was borne by a mythical old woman who was very kind to Theseus in his childhood, and, as a by-form of *έκηλος*, expresses her good nature. This appears from the words of Plutarch (*in vita Thesei*, cxiv.), *τὴν Έκάλην ἐτίμων, Έκαλίνην ὑποκοριζόμενοι, διὰ τὸ κάκεινὴν νέον ὄντα κομιδῇ τὸν Θησέα ξερίζουσιν ἀσπασάσθαι πρεσβυτικῶς καὶ φιλοφρονεῖσθαι τοιούτοις ὑποκορισμοῖς*. *Έκαμήδη* is the name of an active female servant in Homer (*Iliad*, xi. 623), and may be compared with *Περι-μήδης*, and *Γανυμήδης*, the name of another servant.

The forms *ένεκα*, *τούνεκα*, *ούνεκα*, and *όθούνεκα* also require some remark. In the first, the preposition *έν* appears in the stronger form *είν* (above, p. 216), which is used by the Attic writers, not only by itself as in Sophocl. *Antig.* 1226, *είν Ἀδου δόμοις*; Æschyl. *Suppl.* 872, *ἀραίαις εἰν αὔραις* (according to Lobeck's ingenious emendation); but also in composition, as in Sophocl. *Antig.* 346, *πόντου τ' εἰναλίαν φύσιν*, Sophocl. *fr.* 480, *τῆς εἰνοδίας Έκάτης ἔγχος*. This form of *ένεκα* occurs in the Attic prose writers, with the exception of Thucydides, as Thomas Magister tells us: *καὶ ένεκα καὶ εἷνεκα, Πλατων, Δημοσθένης, καὶ οἱ ἄλλοι. Θουκυδίδης δὲ ἀεὶ ένεκα*. Of its use in Plato, the following instances may suffice: *Legg.* p. 778 D, p. 916 A, p. 949 D. It has been remarked by F. A. Wolf (*ad Demosth. Leptin.* p. 338) that the form *ένεκα* never occurs in the

Attic poets, but that they always write *ἐνεκα* or *οὔνεκα* with the same signification. That is to say, when *εἴνεκα* occurs, there are almost always various readings, whereas we often find *οὔνεκα* without any variation in the MSS. It seems, however, quite impossible to suppose that *οὔνεκα* could be used as a mere preposition. It stands precisely on the same footing with *τούνεκα* and *ὀθούνεκα*, which are compounds of *τοῦ* and *ὅτου* with *ἐνεκα*, as *οὔνεκα* is of *οὔ* and *ἐνεκα*. Accordingly, the first should signify "on this account", the other two "on which account"; *τούνεκα* also = *τίνος ἐνεκα* "why"? (Steph. *Thes.* I. p. 1204 G). It would be better, perhaps, to write *τούνεκα* on the analogy of the other two words. Matthiä (*Gr. Gr.* § 624, 2 obs.) adopts the old derivation of *ὀθούνεκα* from *ὅτι* and *οὔνεκα*, objecting to the obvious etymology from *ὅτου* and *ἐνεκα*, given by Lobeck and Buttman, that if this had been the case, it should have been written *ὀτούνεκα*, like *τούνεκα*. But *τούνεκα* is purely Ionic, and the Ionians did not throw the aspirate forwards, for they wrote *οὐκ ἐκάς*, *ἐπ' ὅσον*, *κατάπερ*, and so forth, whereas the Attics would write *ὀθουνεκα* just as they wrote *θῶπλα* for *τὰ ὅπλα*, *θῆμέρα* for *τῇ ἡμέρα*, &c. Reisig in his exposition of the *Œdipus Coloneus* (p. CXXVIII.) is still more absurd, for he considers *ὀθούνεκα* as a compound of *ὅθι* and *οὔνεκα*, and translates it *ubi id est, cujus causa quidque fit*. The proper use of *οὔνεκα* and *ὀθούνεκα* is, as conjunctions, nearly equivalent to *ὅτι*, and signifying "that" or "because", a meaning which they seem to have obtained by a kind of attraction or brachylogy like their synonym *ἀνθ' ὧν*: Sophocl. *Antig.* 1050:

ἀνθ' ὧν ἔχεις μὲν τῶν ἄνω βαλὼν κάτω.

The fuller form may be surmised from a former line of the same play (237):

τί δ' ἔστιν, ἀνθ' οὗ τήνδ' ἔχεις ἀθυμίαν;

that is to say, *ἀνθ' οὗ* stands for *ἀντὶ τούτου ὅτι*, just as *οὔνεκα* is put for *τούτου ἐνεκα, ὅτι*. Ammonius has given the distinction between *οὔνεκα* and *εἴνεκα* correctly enough. He says, *οὔνεκα καὶ εἴνεκα διαφέρει, οὔνεκα μὲν σημαίνει τὸ ὅτι. εἴνεκα δὲ χάριν*. We agree, therefore, with Ahlwardt (*II. ter Beytr. zu Schneider's Wörterb.* 1813) in thinking, that, as the MSS. in many cases, and common sense in all, authorize the

change, we should substitute *εἵνεκα*, which is acknowledged to be good in Attic prose, for *οὔνεκα*, whenever it stands for *ἐνεκα* in Attic verse.

(2) The difference between *ἐνεκα* and *χάριν*, in their use as prepositions, has been correctly stated by Ammonius: "*Ἐνεκα καὶ Χάριν διαφέρει· ὁ μὲν γὰρ Ἐνεκα ψιλὴν τὴν αἰτίαν δηλοῖ, οἷον—ἐνεκα Ἀλεξάνδρου καὶ ἐνεκα Ἑλένης ἐστράτευσε Μενέλαος· ὁ δὲ Χάριν μετὰ τῆς αἰτίας δηλοῖ καὶ τὴν χάριν—χάριν Μενελάου Ἀχιλλεὺς ἐστράτευσε. τούτεστι, Μενελάῳ χαρίζόμενος.* In other words, the strength of the motive only is implied in *ἐνεκα*, while in *χάριν* we are told the action is intended to please some one, or to benefit him in some way; and, to express the distinction with reference to the original meaning of the two words, *ἐνεκα* or *ἐκατι* states that the action has taken place according to the will of a certain person, or with *particular* or *exclusive* reference to some person, thing, or action; whereas *χάριν* always indicates that the action is done to promote some thing or other, or to please or benefit some person, just as the Germans would say *um meiner Willen* in the one case, and *mir zu gefallen* in the other. This distinction is obviously preserved in the following line of Euripides (*Helen.* 1254):

πλούτου λέγ' οὔνεχ' (*leg. εἵνεχ'*), ὅτι θέλεις ταύτης χάριν.

"with regard to wealth in particular, as far as wealth or expenditure is concerned, say what you would have to please her."

It will be remembered that the Greeks said not only *Ἀθηναίων χάριν*, but also *τὴν Ἀθηναίων χάριν* (*Herod. V. 99*); also *ἐμὴν χάριν*, *σὴν χάριν*, like *mea gratia*, *tua gratia*. Besides these modes of expression, we find *ἐν χάριτι τινός* or *τινί*, like *ἐνεκα* = *ἐνέκα*, and *πρὸς χάριν τινός*. The last phrase *πρὸς χάριν* has created some difficulty in two passages of Sophocles, as to whether it should be taken with the genitive cases with which it is found, or absolutely, in the sense of *ut volupe est*; it will not, therefore, be irrelevant to attempt a settlement of the question. The two passages are as follows; *Antig.* 29:

εἴαν δὲ (Πολυνείκους νέκυν) ἄκλαυστον, ἄταφον οἰωνοῖς γλυκὺν
θησαυρὸν εἰσορῶσι πρὸς χάριν βορᾶς.

Philoct. 1155:

ἔρπετε, νῦν καλόν,
ἀντίφονον κορέσαι στόμα πρὸς χάριν
ἐμᾶς σαρκὸς αἰόλας.

It would be absurd to say that πρὸς χάριν can not be taken absolutely; in which case it means "to please oneself," as in Sophocl. *apud Athenæum*, p. 220, πρὸς χάριν τε κοῦ βία. Eurip. *Supplices*, 385, πρὸς χάριν θάψαι νεκρούς. And so πρὸς ἡδονήν is put absolutely in Æschyl. *Agam.* 262. Eurip. *Medea*, 771; although it is found with a dative in Æsch. *Prom.* 502. Eurip. *Iphig. in Aul.* 1022. In the second passage we should be inclined to take πρὸς χάριν in this adverbial sense, but in the first we are convinced it stands in the relation of a preposition to βορᾶς. The following reasons will perhaps make it clear that such is the case. First of all, it must strike any one who has any feeling for Greek construction, that the words πρὸς χάριν βορᾶς come naturally together; χαρίζεσθαι is particularly applied to setting food before people, as when Homer says (*Odys.* i. 140),

σῖτον δ' αἰδοίη ταμίη παρέθηκε φέρουσα
εἶδατα πολλ' ἐπιθείσα, χαριζομένη παρεόντων.

And this seems to have occurred to the Scholiast on the passage of Sophocles, when he wrote, ἡγουν τίς αὐτοῖς βορὰν χαρίσεται, and to Euripides (*Suppl.* 282); μὴ ἀτάφους χάρματα θηρῶν παῖδας κατίδης. That πρὸς χάριν can stand with a genitive as well as by itself is well known, as in this same play of Sophocles we have (908), τίνος νόμου πρὸς χάριν. Eurip. *Med.* 541, πρὸς ἰσχύος χάριν; and Eustathius evidently construes it so: καὶ αὐτοῖς οὐ τοῖς ἀπλῶς, οἷον καὶ τοῖς σπερμοφάγοις, ἀλλὰ τοῖς πρὸς χάριν ὁρῶσι βορᾶς τῆς ἀπὸ τῶν σαρκῶν (*ad Il. θ.* p. 719, 9), only he has not seen the force of εἰσορᾶν, which means "to look at any thing with longing eyes," as in Xen. *Cyrop.* V. 1, § 15 (quoted by Sturz, *Lex. Xen.*), οὔτε τοὺς καλοὺς ἐσορῶ, οὐδέ γε σοὶ συμβουλεύω ἐν τοῖς καλοῖς ἐὰν τὴν ὄψιν διατρίβειν. The sense of the lines of Sophocles evidently is "Creon ordered that the body of Poly-nices should be left unwept and unburied, a glad recourse for birds when they are looking out with greedy eyes for a dinner."

The numerous and important family to which *χάρις* belongs is deserving of a more minute attention than it has hitherto met with. There are, indeed, few sets of words in the Greek language to which researches, such as those in which we are engaged, could be more profitably applied. We may divide the words with which *χάρις* is connected into two classes; first, those which contain the simple root *χα-*, secondly, those which contain the quasi-root *χαρ-* or the root *χα-* with the termination *-ρα*. To the first belong *χάω*, *χάος*, *χαίνω*, *χάσκω*, *χανδάνω*, *χάζομαι*, *χαῦνος*, *χήλη*, *χειά*, *χεῖλος*, *χέλυσ*, *χαλάω*, *χάττω*, *σχάζω*, and *σχίζω*. To the second, *χάρις*, *χείρ*, *χερμάς*, *χοίρας*, *χέρσος*, *χόρος*, *χώρα* and *χῶρος*. If we examine the words of the first class, we shall see that the prevailing and prominent meaning is "opening" or "openness". In this the idea of "hollowness" is implied, and, as that which is hollow may be either full or empty, the contrasted notions of content and vacuity are also conveyed by words of this class. When the termination *-ρα*, which implies motion or continuance, is appended to this root *χα-* signifying "to lay open," the idea of extent or surface naturally results. And thus we find that the words of the second class imply a surface, something laid flat or open, and by inference, a support or basis, something to rest upon. This meaning appears most clearly in the synonyms *χώρα*, *χῶρος*, *χόρος*, which signify a hard, level surface. The word *χόρος* designates a square or public place in which the military people of ancient Hellas met to celebrate their gods with songs and dances of a military character: hence the epithet *εὐρύχορος* which is applied to the ancient cities. The use of *χόρος* to denote the people assembled on these occasions is quite a secondary one. We have hinted elsewhere the connexion of *χόρος* with *χῶρος*, *χώρα* (*Theatre of the Greeks*, 4th Edition, p. 7, note); that this etymology is the true one is clear from what the King says to the Chorus, in *Æschylus, Supplikes* 976: *λαῶν ἐν χώρῳ τάσσεσθε*. *Χέρσος*, which has the collective ending *-σος* subjoined, designates the hard, dry land, as opposed to the sea. It is also an adjective used as an epithet of *γῆ*, and meaning "hard", "untilled", "unbroken by the plough": *Sophocl. Antig.* 251, *στυφλὸς δὲ γῆ καὶ χέρσος*, *ἄρρῶξ οὐδ' ἐπημαξευμένη τροχοῖσιν*; whence it is applied to unmarried women, *Æd. Tyr.* 1502, *δηλαδὲ χέρσους φθαρήναι καὶ γάμους ὑμᾶς χρεών*: by a metaphor similar to that which

Creon uses (in the *Antigona*, 569) in answer to the question of Ismena :

Ισμ. ἀλλὰ κτενεῖς νυμφεῖα τῆς σου τοῦ τέκνου ;

Κρ. ἀρώσιμοι γὰρ χατέρων εἰσὶν γύαι.

The use of *χοῖρας* is much the same as the ordinary one of *χέρσος*. The collective ending of the latter renders it more applicable to signify an extended, continuous surface of dry land. whence *χερσόνησος* means a quasi-island connected at one end with the main-land, a peninsula, whereas *χοῖρας* signifies an island entirely surrounded by water ; thus Delos is called *Δηλία χοῖράς* (*Æschyl. Eumen.* 9). It does not signify a rock under the water, as the Scholiast on Pindar says (*ad Pyth.* X. 81), but merely something hard and fixed against which a ship might strike, and thus it is used as an epithet of *πέτρα* in the passage of Pindar on which the Scholiast is writing : *ταχὺ δ' ἀγκυραν ἔρεισον χθονὶ πρῶραθε, χοῖράδος ἄλκαρ πέτρας*. In the plural *χοῖράδες* signifies “scrofulous humours”, “glandular swellings”, from the general meaning “hard”, “projecting”, borne by *χοῖράς*, just as the Latin name, *struma*, for the same disease, is obviously derived from *struo*. It is singular, that another Latin word, by which the king's evil is designated, namely, *scrofula*, is a diminutive of *scrofa*, “a sow”, just as *χοῖρας* is connected with *χοῖρος*, the common name for a pig ; and *scrofa*, *scrofula* (*scrophula*) are connected with *scrupus*, *scrupulus* and *rupes*, which are synonymous with the more common meaning of *χοῖράς*. There is very little reason, therefore, for deriving *χοῖρας* from *χοῖρος* as Blomfield does (*Gloss. in Æschyl. Pers.* 427). The names of animals seem always to be connected with those of certain qualities which they possess in an eminent degree. When we remember that the hedgehog was also called *χῆρ* or *σχῦρος*, we might suppose that the bristly skin of the hog was described by the name. But as this attribute would be better expressed by another root, Sanscrit *vr̥ih*, Greek *φρικ*, which appear in *varaha*, *φρίσσειν*, and *verres*, and as the general outer form of the pig and the hedgehog suggests the more general idea of a hard projecting object, it is more reasonable to conclude that the name refers to that appearance of the hog's back, which has given rise to the name of the Surrey hill, mentioned by Blomfield in the note above referred to. The same idea is con-

veyed by *porcus*, *porca*, which we are inclined to connect immediately with the Sanscrit root *vr̥h*, “to grow up” (Pott, *Etym. Forsch.* II. p. 53); the derivation from *porricere* suggested by Varro and Festus does not seem probable. It signifies not only a pig, but also a balk or high ridge between two furrows, and when applied to a man it refers to his size, not to his uncleanness or gluttony. For another meaning in which *χοῖρος* and *porca* coincide and which is well known to the readers of Aristophanes, we must refer to the application of *χέρσος* to unmarried women, mentioned above. Although it is clear that *χερμὰς* is connected with *χείρ*, it does not therefore follow that it is immediately derived from it, with the limited signification *λίθος χειροπλήθης*, as the Grammarians and Blomfield (*Gloss. in Æschyl. Sept. c. Thebas*, 287) suppose. *Χερμὰς* itself indicates only the hardness and roughness, not the size of the stone. Indeed, it appears that the by-form *χερὰς* rather implies a collection of small stones, shingle, &c., whence *πάμφορος χερὰς* (Pind. *Pyth.* VI. 13), than any one large and heavy stone. The German *hart*, English “hard”, are evidently connected with the quasi-root *χαρ-* in this signification. With regard to *χείρ* itself, the primary meaning seems to be a combination of the ideas of extension and support, out of which the secondary one of taking, holding, &c. very soon developed itself. In this latter sense it is connected with the Sanscrit verb-root *hri*, “to take”, the Latin *hir*, and the Greek *αἰρέειν*, *κάρ-πος*, *ἀρπάζειν*, &c. (above, p. 200, note 1). The verbs *χραύω*, *χρίμπτω*, &c., the primary meaning of which is “to touch” (Ruhnken, *Timæus*, p. 104), are also secondary to *χείρ*. The words *γέν-το*, *hin-than*, *hand*, *pre-hend-ere*, &c. although bearing the same signification, seem rather to be connected with the *anusvâra* form *χανδάνω*.

The idea of “opening” conveyed by the root *χα-* would very naturally be applied to yawning, a wide opening of the jaws, or, in general, to the mouth, the fissure which most frequently meets the eye. Hence, we have, as connected with this root, the words *χεί-λος* “a lip”, *χά-σκω* “to yawn”, *χά-σμα* “a yawning”, *χά-σμημα* “the wide opening of a bird’s mouth” (Aristoph. *Av.* 61). By a further transition, the secondary root *χα-ρ-* is employed to denote the noise proceeding from a widely opened mouth, the roar of a lion for instance. Hence it is

that *χαροπός* and *χάρωψ* are common epithets for the lion, and Hesychius tells us that *χάρων* was a name for that animal: *χάρων. ὁ λέων ἀπὸ τῆς χαροπότητος*. The reason that he gives for it is absurd, for no one would derive *χάρων* from *χαροπός*, though he might derive *χαροπός* from *χάρων*. The idea that the epithet *χαροπός* refers to the colour of the lion is quite erroneous, else how could Lycophron call Achilles *περκνὸς αἰχμητῆς χάρων*? for *περκνός* means black. Hesychius and his commentators had a distant inkling of the truth, as appears from the glosses and notes in Alberti's edition, Vol. II. col. 1544. *Χαροπός. περιχαρής* (we should read *περιφερής* with Suidas), *γλαυκός, ξανθός, φοβερός*, on which Schrevelius writes: *χαροπός — a χάρω, id est, χάσκω, χαρόω, χαρόπω, χαροπός id est ὁ χάσκων. G. Apollon. Schol. p. 62. Χάρυβδης. χάσμα θαλάσσης. Χάρυβδης. ὠμόβροτος. ἡ ἀναπινομένη θάλασσα. Χαροπόν. ξανθόν. γλαυκόν. φοβερόν. περιφερῆ, on which Salmasius asks: *An χαροπός est ὁ χάσκων, idem τῷ χάρων, unde φοβερός exponitur?**

We believe that *χάρων* and *χάρυβδης* originally meant "the open-mouthed animal" and "the sea that sucked every thing in;" as Hesychius says a few lines lower down: *Χάσμα θηρός. ὄψις θηρός. ἡ [χάσμα πελάγους τὸ τῆς] θαλάσσης πρόσωπον* (according to Faber's reading), but that afterwards *χαροπός* was used with that signification in regard to the lion's mouth, while *χάρων* came to signify the lion in general as a wide-mouthed roaring beast. There are two reasons which lead us to the conclusion that the lion's roar is particularly referred to in this name. The first is, that Charon (*ὁ χάρων* "the roarer") is so constantly spoken of in connexion with the *χθονία βροντή*; the following passages among many others will prove this. Diog. Laërt. VII. 28 (*in vita Zenonis*), *ἐτελεύτα δὲ οὕτως. ἐκ τῆς σχολῆς ἀπίων προσέπταισε, καὶ τὸν δάκτυλον περιέρρηξε. παίσας δὲ τὴν γῆν τῇ χειρὶ φησι τὸ ἐκ τῆς Νιοβῆς. Ἔρχομαι τί μ' αὔεις; Photius, I. p. 301, Porson, Νοβακκίζειν: τὸ ὀπχούμενον τοῖς δακτύλοις ἐπιψοφεῖν· σείσμος Νιόβη. Athenæus, p. 341 c,*

ἀλλ' ἐπεὶ

ὁ Τιμοθέου Χάρων σχολάζειν μ' οὐκ ἐᾷ
οὐκ τῆς Νιόβης, χωρεῖν δὲ πορθμὸν ἀναβοᾷ.

Euripides *Alcestis*, 252,

ὄρῳ δίκωπον ὄρῳ σκάφος, νεκύων δὲ πορθμεὺς
ἔχων χέρ' ἐπὶ κοντῷ Χάρων μ' ἤδη καλεῖ· “τί μέλλεις;
ἐπείγου· σὺ κατείργεις”. τάδε τοί με σπερχόμενος ταχύνει.

Our other reason for drawing this inference, is the perfect analogy that subsists between the root *χαρ-* and the root *βο-* or *βοF-*. Thus, *χάρων* “the roaring animal”, *βους* = *βόF-is* “the bellowing animal” (and here the roots *hri* and *vrih*, which so often come in contact, present another parallelism, for as *χάρων* is “the lion”, so is *vrisha* “the bull” in Sanscrit, from whatever quality the name may be derived); *χάρ-μη*, and *βοF-ή*, “the battle-shout”, by an extent of usage “the battle itself”; hence *βοήν ἀγαθός*. ὁ κατὰ τὴν μάχην ἀνδρείος; *βοήθου*. κατὰ τὴν μάχην ταχύ (Hesych.), from which comes the word *βοηθεῖν* “to assist”: also *βοηθεία* and *βοηδρομία*, “a running to a man’s assistance in battle.” From *χάρ-μη*, in a perfectly similar way, we may derive *χραιομεῖν*, which the Greeks used as a synonym for *βοηθεῖν*, and also for *ἐπαρκεῖν*, a word which we will discuss presently (*Schol. on Apollon. II.* 218). In immediate connexion with this word we have *χάρις* “help”, *χρᾶν* “to offer help or assistance”, and *χρησίμος* “a person capable of offering help or assistance.” To this also belongs the use of *χρεία* in *Æschyl. Sept. c. Theb.* 49; *ἐξιστορήσαι μοῖραν ἐν χρείᾳ τύχης*, and *Soph. Aj.* 963, *θανόντ' ἂν οἰμώξειαν ἐν χρείᾳ δорός*.

A most remarkable confirmation of this etymology will be found in the word *ἦρα*, which Buttman has so fully, and, upon the whole, so satisfactorily discussed. The root of this word is found in *ἄρ-ης*, “war”, *ἄρ-είων*, *ἄρ-ιστος*, *ἄρ-ω*, *ἄρ-έσκω*, *θυμ-ήρ-ης*, *ἐρί-ηρ-ος*, *ἄρ-μενα*, *ἄρ-κεῖν*, and *ἄρ-ήγειν*. The element *αρ- ηρ*, which forms the basis of this last set of words, has lost an initial digamma, as appears from a comparison of *ἀρετή*, *ἄρρην*, *arma*, *ἦρως*, *Ῥαρίων*, with “war”, *Wehr*, *wehren*, *vir*, *virtus*, “warrior”; as *m* is often only another form of *v* (comp. *Mulciber* with *Vulcanus*, the first pronominal element under the forms *ma*, *va*, and the German *meinen* with *wähnen*; *Minne*, with *Ven*, *Winnesjäfle* “friend”, “friendship”, and *Venus*), we may also compare the words *Ἄρης* and *ἄρρην*, with *Mars* and *mas* (*maris*), (*Buttmann, Abh. Ak. Berl.* 1826,

p. 58). Now the element **Far-** is obviously related to the Sanscrit root *vr̥h*, "to protect" or "shelter", from which comes *vr̥h*, "to grow up", as may be seen by comparing *vīra* "a hero" with *ἥρως* and *vir*, and *varīyas* and *varisht'h'as* with *ἀρείων*, *ἄριστος* (see Pott, *Etymol. Forsch.* I. p. 221). As the root *hri* "to take", which we shall see has other points of contact with *vr̥h*, the secondary form of this root, appears in *χείρ*, &c., so does this root *vr̥h* appear in **Farίστερος** "the left hand", and **Farιθμεῖν** "to count with the fingers" (above, p. 203, note). In the words from the root **Far**, which we have enumerated above, there is precisely the same transition of ideas as in the two sets of derivatives from *χάρμη* and *βοή*, which we have just been considering. This would be sufficiently clear from Hesychius only, if we had no other means of showing it. See the following glosses: *Ἐπίηρα. τὴν μετ' ἐπικουρίας χάριν μεγάλην, ἢ ἐκ τῆς περιουσίας ὡς Ἀντίμαχος.*—*Ἐπίηρος. ἐπίκουρος. ἐπιθυμητής.*—*Ἐπίηρος. βοηθός. χάριν ἀποδιδούς.*—*Ἐπιήρεα. ἐπιχαρίτια.*—*Ἡρα. ἦτοι, ὄντως. ἢ χάριν, βοήθειαν, ἐπικουρίαν, πατρὶ φίλῳ ἐπὶ ἥρα φέρων Δί. ἢ ἔφη,* and the words of Apollonius, *Ἐπίηρα, τὴν μετ' ἐπικουρίας χάριν. Μητρὶ φίλῃ ἐπίηρα φέρων, ἐν δὲ τῷ, οὐδέ τί μοι ποδάνιπτρα ποδῶν ἐπίηρ' ἀνὰ θυμῷ, τὰ ἐπικουρητικὰ τῆς ψυχῆς. οὕτως Ἀρίσταρχος.* If, in addition to all this, we compare *ἐπιηρα-φέρειν* = *ἐπαρήγειν* = *ἐπαρκεῖν*, with *ἐπιβοηθεῖν*, *χάριν φέρειν*, and *χραιομεῖν*, we must feel an irresistible conviction that these expressions are all due to the same train of ideas in a Greek mind; that, in fact, the ideas of good, assistance, favour, and pleasure, were evolved in the Greek language from the military feelings of the heroic age.

The secondary root **χα-ρ-** appears with the pronominal affix **-κ-** in the word *χάραξ* and its derivative *χαράσσω*. It will be desirable to explain these two words. We are told that when *χάραξ* signifies "a vine-prop", it is feminine, when it denotes "a palisade", it is masculine: thus Mœris says (p. 372, Ed. Koch); *Χάραξ, ἡ μὲν πρὸς ταῖς ἀμπέλους, θηλυκῶς. ὁ δὲ ἐν τοῖς στρατοπέδοις ἀρσενικῶς.* And Phrynichus (p. 61, Lobeck); *Ἡ χάραξ ἐρεῖς θηλυκῶς τὸ τῆς ἀμπέλου στήριγμα, οὐ κατὰ τὸ ἀρρενικόν.* A similar remark is made with regard to *κάμαξ* in the *Etymologicum Magnum*. From this we conclude that the two significations of the word belong to different ages of the Greek

language. Now ἄμπελος was feminine from the first; and as the vine leans upon and twines round its prop, like a sister, for support, it may be believed that the oldest signification of χάραξ was “the supporter or helper of the vine”, in which sense its connexion with the family of words we have been discussing is indisputable. In confirmation of this, let us observe that we find in Homer the word ἀοσσητήρ, in the sense “a person who stands behind us to help us up” (*Iliad* xv. 735):

ἢέ τινάς φάμεν εἶναι ἀοσσητήρας ὀπίσσω.

Now ἀοσσητήρ is obviously another form of ἄοζος, “a servant” or “helper” (*Æsch. Agam.* 209), and ἄοζος means “a branch which grows up by the side of another branch”, for, according to Theophrastus (*Hist. Plant.* I. 13), ὄζος is that part of a tree from which the branch sprouts out, and consequently as ἀ-δελφὸς means “he who springs from the same δελφὺς or womb”, so ἄ-οζος means “the sister-branch”, “the branch which derives its origin from the same *nodus*”: therefore ἀοσσητήρ, which the Scholiast on Homer (*loc. cit.*) explains by βοηθός, conveys the same idea as χάραξ, and conversely χάραξ may imply a βοήθεια, or is naturally connected with χάρις, according to our former investigation. Χαράσσω is of course formed from χάραξ, just as καμάσσω is from κάμαξ; and as καμάσσω means “to make like a reed” (κάμαξ), that is, “to cause to shake”, so χαράσσω properly signifies “to make like a stake”, that is, “to sharpen”, and in this sense the word frequently occurs in the oldest writers. It also signifies to produce the effects of a sharp instrument on some substance, just as ἀνάσσω means “to perform the functions of a king” (ἄναξ), and it is to this latter sense that we owe the important word χαρακτήρ, both as it is applied to signify “the stamp on a coin”, and as it is figuratively used to denote the stamp of mind which distinguishes one man from another. In Hesychius we have the gloss: κεχαραγμένος. ὠργισμένος, which is supported by Herodotus, VII. 1, μέγας κεχαραγμένον τοῖσι Ἀθηναίοισι, and Eurip. *Med.* 157, κείνῳ τόσον μὴ χαράσσου. This meaning might seem to be derived from the first signification of χαράσσω, for θήγομαι and ὀξύνομαι are used in a similarly metaphorical manner. If, however, the ingenious emendation of Matreas (*apud Athen.* p. 19 D) suggested by Blomfield (*Gloss. ad Pers.* 689) is to be received, we must conclude that the meta-

phorical use of *χαράσσειν* is derived from the second of the primitive meanings. The passage in Athenæus stands thus. Ἐποίησε δὲ οὗτος (ὁ Ματρίεας) καὶ παρὰ τὰς Ἀριστοτέλους ἀπορίας, καὶ ἀνεγίνωσκε δημοσίᾳ διὰ τί ὁ ἥλιος δύνει μὲν κολυμβᾷ δ' οὐ καὶ διὰ τί οἱ σπόγγοι συμπίνουσι μὲν συγκωθωνίζονται δ' οὐ καὶ τὰ τετράδραχμα καταλλάττεται μὲν, ὀργίζεται δ' οὐ. Blomfield reads *χαράττεται*, which, as a synonym for *ὀργίζεται*, is more in place here than *καταλλάττεται*, which bears just the contrary signification.

It has been mentioned before (p. 59) that associations by way of contrast are often expressed by the same root or element in the languages with which we are concerned. This is particularly remarkable in the class of words into which the element *χα-ρ-* enters. That the notions of emptiness and containing are both expressed by the simple root *χα-* has already been shown. Now we find precisely the same conversion in the derived root *χα-ρ-*, the primary acceptation of which is "protection", "good", "benefit", and the feeling of joy which the possession of such things imparts. By the law of association mentioned above it also denotes the feeling of desire created by the want of such things. Thus *χρήζω* and *χῆρος* belong to the same family with *χάρις*, *χραισμέω*, *χρησθαι*. The ideas expressed by both these sets of words are included in the single word *χρεία*, which denotes both "use" and "need", and the uncertainty which arises in some cases as to the proper way of translating this word shows how nearly these ideas are connected with one another. Hesychius uses *χρείαν ἔχων* as an interpretation of *χατέων*, *χῆρος*, and *χρητίζων*, and the doubt entertained by the critics as to whether we should read (*Æschyl. Pers.* 815) *σωφρονεῖν κεχρημένον*, "in want of teaching", or *σωφρονεῖν κεχρημένοι*, "having wisdom", is a sort of proof that the verb also conveys these two ideas (*Wellauer ad l. Æschyl.* and *Elmsl. ad Eurip. Heracl.* 801). We observe the same connexion in the Latin *cārus*, *gratus*, *grates*, and *gratia*, which Passow considers to be connected with this element. *Cārus* may be a corrupted participle from *cāreo*, just as *pūrus* is a participle of *pūto*; *vērus* of *vēreor*; *procērus* of *procello* (where the *e* is short by nature, compare *cōlumen*, *s-cēlus*, *procūlus*, *βου-κόλ-ος*, &c.); *obscūrus* of *ob(s)cūlo* = *occūlo*. We have a by-form of *cārus* in *cassus*, which seems to be the proper form of a participle from some verb like *χατέω*; compare *fateor*,

participle *fassus*. *Grâtus* = *cărătus* might be the participle of a derivative verb like *cărăre*, if it existed. It would be foreign to our present purpose to enumerate all the Latin words of this family; otherwise it would be easy to show that the ideas of value, preciousness, consequent difficulty in obtaining, or even striving in vain to get, and therefore being without, are developed from one another in that language also, like the two meanings of the English adjective "dear". Döderlein, therefore, is mistaken when he derives *careo* and *cassus* from *κείρειν*, *καρῆναι*, *carpere*, *κάρφειν* (*Lat. Synon. und Etym.* III. p. 114, note), as opposed to *carus* and *gratus*, which, he admits, are connected with *χάρις* and *χαίρω* (p. 254).

Bopp (*Glossar. Sanscr.* p. 212) and Pott (*Etymol. Forsch.* I. p. 272) are inclined to connect *χαίρω* with the Sanscrit *hr̥ish*. The primitive meaning of this Sanscrit root is "to be erect", and it is particularly applied to the hair of the head, whence the epithet *hr̥ishṭa-rômā*, "with the hair of the body on end" (*Bhagavad-Gita*, XI. 4; Lassen, *Anthologia Sanscritica*, p. 4, l. 9). In a secondary sense, it signifies "to rejoice", "to be elated", "to exult", "to be exceedingly pleased", "to have the hair of the body erect with pleasure"; so that it seems to agree in all its meanings with *φρίσσω* (root *φρικ-*) rather than with *χαίρω*. Whether it is applied to the projecting spears of a body of soldiers, to the erect hairs of the head, to the standing corn, to the first ripple on the sea, or to the appearance of the skin when one is shivering from cold (which we call "goose's skin"), the primary meaning of *φρίκη*, *φρίξ*, *φρίσσω*, is always projection or unevenness in a physical sense; the mental emotion sometimes implied being always secondary and metaphorical. We have the same idea in the Latin *horrere* (= *horsere*?), *hirsutus*, &c. Although these words are so nearly connected in meaning, it is difficult to pronounce a decided opinion as to their etymological relation to one another. It is clear that *hr̥ish-*, *hirs-*, and *φρικ-* must be secondary formations, and it is obvious that the two first are the same root. We are inclined to connect *φρικ-* with the Sanscrit root *vr̥ih* "to grow", so that this root, the meanings of which bear a great resemblance to those of *χερ-*, again approximates in its secondary lengthened form *φρικ-*, to a secondary and lengthened form of the other root *hri*. It is singular that not only does this root *hri* agree with *χαρ-* in its mi-

litary use (for *pra-hri* signifies “to fight”, and *pra-hâra* “a combatant”), but we have the Homeric *χάρμη* even in the modern languages of Europe, as a remnant of the warlike Goths. Thus we have the German *Schirm*, Italian *Scherma* with one of the primitive meanings of the element *χα-ρ-*, namely, defence, protection, reliance, &c.; and German *Scharmützel*, Italian *Scherma*, English *Skirmish*, with the common Homeric signification of *χάρμη*, to which these words are related, as the German *Schaum* to *χυμός*, *Schelm* to *χάλιμος*, *χαλίμαδες*, and *Schief* to *χαβός* (See Döderlein *Vocabulorum Homericorum Etyma*, p. 14).

(3) Before we consider the remaining significations of *χάρμης* it will be proper to discuss *δίκη*, the third of those nouns which are used as prepositions, for it bears a remarkable analogy, in some of its applications, to *χάρμης*. As a preposition with the genitive case, *δίκη* is equivalent to the Latin *instar*, and signifies “like”, “after the likeness of”. Thus in Pindar (*Pyth.* II. 84), *λύκοιο δίκαν*, “just like (i. e. justly) a wolf”; Æschylus (*Agam.* 3), *κυνὸς δίκη* “just like a watch-dog.” The use of *δίκη* as a preposition seems to be for the most part confined to the older poets; for, although it occurs even in Plato and Aristotle, it is generally used when an air of quaintness or a poetical colouring is designed. For instance, in Plato, *Legg.* VI. p. 773, *οὐ γὰρ ῥάδιον ἐννοεῖν, ὅτι πόλιν εἶναι δεῖ δίκην κρατῆρος κεκραμένην*, he seems to be quoting some line from a play, such as *πόλις δίκην κρατῆρος ἦν κεκραμένη*; just as, in *Legg.* X. p. 886 E, *λόγοισι δὲ ταῦτα εὖ πῶς εἰς τὸ πιθανὸν περιπεπεμμένα* (“well incrustated, covered, or concealed with words, so as to appear probable”), he seems to have had in his head some line of an old comedian—perhaps *λόγοισι δ’ εὖ πῶς ταῦτα περιπεπεμμένα*; comp. Aristoph. *Plut.* 157, *ὀνόματι περιπέττουσι τὴν μοχθηρίαν*. *Vesp.* 668, *ῥηματίοις περιπεφθείς*.

The sense of *δίκη*, which has given rise to this use of its accusative or old locative case as a preposition, is found in Homer, *Odys.* xviii. 274, *μνηστήρων οὐχ ἥδε δίκη τὸ πάροιθε τέτυκτο*, and in Pindar, *Pyth.* I. 50, *τὰν Φιλοκτήταο δίκαν ἐφέπων*, which the Scholiast rightly explains: *τὸν Φιλοκτήτου τρόπον μετερχόμενος*, for *τρόπον*, is also used in the same way as *δίκη*, as in Æschyl. *Agam.* 48, *τρόπον αἰγυπιῶν* “like vultures”. Hesychius also recognizes the meaning of likeness or

similitude here implied, as will appear from the following glosses : *δίκη*. ὁ τρόπος—*μνηστήρων* (he refers to the passage of the *Odyssee* above quoted); *δίκηλον* (1) ἐκτύπωμα, ὁμοίωμα, εἶδωλον, ἀνδρίας, ζώδιον. παρὰ Λάκωσιν. (2) φάσμα, ὄψις, εἶδωλον, μίμημα. ὅθεν καὶ ὁ μιμολόγος παρὰ Λάκωσι, *δικηλίστας*. (3) ἄγαλμα ἀνδρίαντος; *δίκην*. (1) καθάπερ, ὥσπερ, ὁμοίως. (2) *τρόχου* (read *τρόπον*); *δίκης*. *τρόπου*. *δίκη* (this word should be inserted). ὁμοίωσις. ἢ κρίσις. But this is only a secondary sense of *δίκη*. The following considerations will convince us that its primary meaning was “an equivalent”, that is, not only a similitude, but an identity. This appears most clearly from the uses of *δίκαιος* in the best writers. Thus, we have in Herodotus, II. 149, αἱ δ' ἑκατὸν ὀργυιαί δίκαιαί εἰσι στάδιον ἑξάπλεθρον. “One hundred fathoms are exactly or *just* equivalent to a stadium.” Referring to which, as it seems, the *Antiatticistes* says (*Bekk. Anecd.* p. 90, l. 20), *δίκαιον μέτρον*: τί ἴσον. Ἡρόδοτος δευτέρῳ. Similarly, Xenophon, *Cyrop.* II. 2, § 26, οὔτε γὰρ ἄρμα δήπου ταχὺ γένοιτ' ἂν βραδέων ἵππων ἐνόντων, οὔτε δίκαιον ἀδίκων συνεζευγμένων, “when the horses are not a pair;” and we have *δίκαιον σῶμα* “a body equal on both sides,” *δικαιοτάται ἀντιρρόπαί*, “perfect equilibrium,” *κατατάσιν ὁμάλην καὶ δικαίαν* “an equal, level extension” (quoted from Hippocrates by Schneider). It is to this primary sense that the moral, legal, and political use of *δίκη* is due, *just* as from the similar application of the Latin *æquus* and *iniquus* spring the sense of counterpoise or equivalence. Thus, *δίκην δοῦναι*, λαβεῖν, ἔχειν, διώκειν, &c. “to give, obtain, have, or endeavour to get, satisfaction or an equivalent for some injury,” on the principle of the *lex talionis*, which the old Greek legislators considered to be perfect justice. Aristotle, who does not admit of the universal applicability of retaliation (*Eth.* V. 5), and would rather consider *δίκη* as a something proportional (*ἀνάλογόν τι*), than as an equivalent (*Eth.* V. 3, § 8); was nevertheless perfectly aware, that, according to the ordinary acceptation of the term in Greece, *δίκη* conveyed the idea of a *quid pro quo*: for he says that inequality and injustice are synonymous terms, and that to have more than one's share (*πλεονεκτεῖν*) is to commit an injury; the same appears from his ingenious but false derivation of *δίκη* from *δίχα* (*Eth.* V. 4, § 9); τὸ δ' ἴσον μέσον ἐστὶ τῆς μείζονος καὶ

ἐλάττονος κατὰ τὴν ἀριθμητικὴν ἀναλογίαν· διὰ τοῦτο καὶ ὀνομάζεται δίκαιον, ὅτι δίχα ἐστίν· ὥσπερ ἂν εἴ τις εἴποι δίχαιον· καὶ ὁ δικαστὴς διχαστής.

We now return to χάρις, which, besides the meanings we have already discussed (namely, good, protection, benefit conferred, and the feeling of joy which such things create), also expresses "gratitude", "a desire to return a favour", and, in its widest sense, every thing that is graceful, amiable, and charming. Ἡ Χάρις, or more generally in the plural αἱ Χάριτες are the goddesses who preside over all that imparts a charm to the social relations of man (Pindar, *Olymp.* I. 30, Χάρις, ἅπερ ἅπαντα τεύχει τὰ μείλιχα θνατοῖς. *Olymp.* XIV. 5, Χάριτες—σὺν ὑμῖν—τά τε τερπνὰ καὶ τὰ γλυκέα γίγνεται πάντα βροτοῖς); who love that interchange of good offices which is the foundation of δίκη or "give and take." Thus Aristotle says (*Ethic.* V. 5, § 6): τῷ ἀντιποιεῖν γὰρ ἀνάλογον συμμένει ἡ πόλις· ἡ γὰρ τὸ κακῶς ζητοῦσιν (εἰ δὲ μὴ, δουλεία δοκεῖ εἶναι, εἰ μὴ ἀντιποιήσῃ)· ἡ τὸ εὖ (εἰ δὲ μὴ, μετάδοσις οὐ γίνεται, τῇ μεταδόσει δὲ συμμένουσι). διὸ καὶ Χαρίτων ἱερὸν ἐμποδῶν ποιοῦνται, ἵνα ἀνταπόδοσις ἢ τοῦτο γὰρ χάριτος ἴδιον· ἀνθυπηρετῆσαι γὰρ δεῖ τῷ χαρισαμένῳ, καὶ πάλιν αὐτὸν ἄρξαι χαρισάμενον. And hence the Eumenides, praying that there may be no factions at Athens, say (*Æschyl. Eumen.* 970),

χάρματα δ' ἀντιδίδοιεν κοινοφελεῖ διανοίᾳ,
καὶ στυγεῖν μιᾷ φρενί.
πολλῶν γὰρ τόδ' ἐν βροτοῖς ἄκος.

And similarly, the Theban orator in Thucydides (III. 67): καὶ ἡμῖν ἄνομα παθούσιν ἀνταπόδοτε χάριν δικαίαν ὧν πρόθυμοι γεγενήμεθα. At Athens, according to Josephus (*Antiquit.* XIV. c. 8, § 5, p. 699), a common temple was erected to them and the Demus: στηῆσαι αὐτοῦ εἰκόνα χαλκῇ ἐν τῷ τεμένει τοῦ Δήμου καὶ τῶν Χαρίτων; and their statues stood at the entrance to the Acropolis, where they were worshipped with mysterious rites: Pausan. IX. 35, § 3, Ἀθήνησι πρὸ τῆς ἐς τὴν Ἀκρόπολιν ἐσόδου Χάριτές εἰσι καὶ αὗται πρεῖς· παρὰ δὲ αὐταῖς τελετὴν ἄγουσιν ἐς τοὺς πολλοὺς ἀπόρρητον. There was a colossal statue of the patroness Juno by Polycletus in the Heræum at Argos, on whose crown the Hours and Graces were sculptured, and their statues were in the Pronaus (Pausan. II. 17, § 3, 4, and

V. 11, § 7). The chief attribute of the Graces was sociability: they are represented as inseparable from one another, and as promoting all kinds of unions among mankind;—that of matrimony, of the family (πάτρα), of the civic phratria at the ἐστίασις, of the whole state or race at the public festivals (Müller, *Orchomen.* p. 180). It is with this feeling of the political significance of their worship that Pindar says (*Pyth.* VIII. 21):

ἔπεσε δ' οὐ Χαρῖτων ἐκάς
 ἃ δικαιόπολις ἀρεταῖς
 κλειναῖσιν Αἰακιδᾶν
 θίγοισα νᾶσος.

for he would hardly have used the epithet δικαιόπολις had there not been some connexion in meaning between χάρις and δίκη; the meaning is “the fair-dealing and glorious island of Ægina is not disregarded by the Graces,—for they preside over the intercourse of men, and are also the givers of glory.” The epithet δικαίπολις,—which is properly applicable to a man (it is the name of the hero of the *Acharnians* of Aristophanes, and is analogous to ἄπολις, ὑψίπολις, &c.), but is here applied by personification to Ægina,—refers to the fairness, which characterized the commercial dealings of that island, and for which Pindar elsewhere extols its inhabitants. *Olymp.* VIII. 20;

ἔνθα Σώτεια Διὸς ξενίου
 πάρεδρος ἀσκεῖται Θέμις
 ἔξοχ' ἀνθρώπων, ὅτι γὰρ πολὺ καὶ πολλᾶ ῥέπει
 ὀρθᾶ διακρίνειν φρενὶ μὴ παρὰ καιρόν,
 δυσπαλές, τεθμὸς δέ τις ἀθανάτων καὶ τάνδ' ἀλιερκέα χώραν
 παντοδαποῖσιν ὑπέστασε ξένοις
 κίονα δαιμονίαν.

where Θέμις is only another name for δίκη: see Sophocl. *Æd.* Col. 1384,

ἡ παλαίφατος
 Δίκη ξύνεδρος Ζηνὸς ἀρχαίοις νόμοις.

In the Pythian hymn quoted above ἔπεσε does not refer to the insular position of Ægina, as Dissen supposes, but is used in the same sense as in Sophocl. *Aj.* 620,

τὰ πρὶν δ' ἔργα χεροῖν
 μεγίστας ἀρετὰς
 ἀφιλα παρ' ἀφίλοις
 ἔπεσ', ἔπεσε μελέοις Ἀτρεΐδαις,

as the Scholiast perceived: ἡ δὲ δικαίopolis νῆσος Αἴγινα οὐκ ἐξέπεσε τῶν Χαρίτων.

The etymological connexion of *δίκη* and *χάρις* is even more remarkable than their analogy in signification. As *χάρις* is connected with *χείρ*, the general name for a hand, and with a number of words signifying "to take or hold" (above p. 200, note), *δίκη* is obviously connected with *δέκ-σιος*, the name for the right hand, with *δάκτυλος*, "the finger", and with a number of words denoting "to receive" (*δέκομαι*, &c.), or "to point out" (*δείκνυμι*, &c.), (above p. 202, note). The element of the word is, as we have seen (above p. 197 foll.), a compound of the numeral "two" with a root signifying "to take", and probably connected with the root *hri*, which appears in *χείρ*. The form *δι-* of the first syllable is on the analogy of *διά*, *δί-δυμος*, &c., and is more regular and original than the *δε* of *δέκα* or the *δα* of *δάκτυλος*. We have this *ι* in *δείκνυμι*, where it is affected by *guna*, in the Sanscrit *dic*, and in the Latin *dicis causa*, *dicere*, *digitus*, *dignus*, &c. Herodian remarks (*περὶ μονήρους λέξεως*, p. 14) that the accentuation of *δίκη* is very singular, because a barytone noun of this kind ought either to have a consonant before the *κ*, like *κίρκη*, *δίρκη*, *τρίκκη*, or the *ι* should be long, as in *νίκη*, *φρίκη*—*ἡ τοίνυν δίκη σημειῶδες. λείπει γὰρ ἢ χρόνῳ ἢ συμφώνῳ*. Nouns in *η*, formed from adjectives in *ικός*, are naturally oxytone: but there is no reason whatever why *δίκη*,—which has no connexion with the pronominal termination *-ικός*, but is formed directly from the verb-root *δικ-* (*δίκη* for *δίκυα*),—should not follow the analogy of *ἐλίκη*, *ἐκάτη*, *μελέτη*, &c.

CHAPTER V.

THE ADJECTIVE.

ETYMOLOGERS have found or created for themselves very great difficulties in the nouns adjective. We do not intend to set forth all the explanations which have been offered with regard to their nature and functions. It will be better to state at once that the adjective differs etymologically from the substantive only in being capable of flexion through the different genders of the substantive to which it is joined. Otherwise it is as much the designation of a quality or attribute as the substantive itself. As for the compound adjectives, they are in many languages merely substantives subjoined to adjectives.

To the student of Greek the subject of the adjective is particularly interesting, and especially in its connexion with the participle, a kind of word of which more use is made in Greek than in any other language, so much so that the Greeks have been emphatically called φιλομέτοχοι, or lovers of participles. In this language, more perhaps than in any other, we recognize the truth of the statement that an adjective is as truly a noun or the name of a thing as a substantive; a great number of adjectives in this language have taken their station among the most common of the substantives, and there is no single Greek adjective or even participle which may not become a substantive if it only have the definite article prefixed, if, in a word, it have that accompaniment which is necessary for the conversion of a substantive, as the name of a quality or attribute, into the name of a particular thing. Indeed, to such an extent has this been carried, that many adjectives, especially those ending in -κή, which have got a substantive-use by prefixing the article and omitting the substantive τέχνη, have at last become so completely substantives, that the article is always omitted, except in those cases where a substantive would require the article (see Middleton *on the Greek Article*, pp. xxi. 50 note, edit. Rose). This restricted employment of a general attribute may

be compared with the use of βασιλεὺς without the article when a particular king, *the* king of Persia is meant.

There are instances in Greek where scholars are still uncertain, whether a particular substantive-use or a general adjective-use is intended. We will select one which will give us an opportunity of correcting a general misinterpretation of some passages in the Greek poets.

The word γεραρός is in Homer an adjective, and an epithet of honor. Thus Priam, describing Agamemnon (*Il.* iii. 170), says :

καλὸν δ' οὕτω ἐγὼν οὐπὼ ἴδον ὀφθαλμοῖσιν,
οὐδ' οὕτω γεραρόν· βασιλῆϊ γὰρ ἀνδρὶ εἴοικε.

and Antenor, contrasting Ulysses with Menelaus (*Il.* iii. 211),

στάντων μὲν Μενέλαος ὑπείρεχεν εὐρέας ὤμους,
ἄμφω δ' ἐζομένω, γεραρώτερος ἦεν Ὀδυσσεύς.

The Scholiast's interpretation of the former is ἐντιμον, of the latter ἐντιμότερος πρὸς ὄψιν, and we have no doubt he is right; γέρας, γέρων, and γερήνιος or γέρην are explained in the same way by Hesychius: γέρων. ἐπὶ μὲν τοῦ ἐντίμου—κίκλησκειν δὲ γέροντας ὀριστῆας (*Iliad.* ii. 404), γέρας γὰρ ἡ τιμή; γερήνιος ἐντιμος, γέρων; γέρην, ἐντιμος. Γεραρός is formed by the common suffix -ρός from the word γέρας, "the privilege or peculiar gift of a person in authority,"—e. g. the first share of the booty and so forth—especially "the hereditary privileges and prerogatives of a king": in which sense it was equivalent to ἔρανος (see Welcker *Trilog.* p. 381 note). Hence Thucydides says of the old kings of Greece (I. 13) πρότερον δὲ ἦσαν ἐπὶ ῥητοῖς γέρασι πατρικαὶ βασιλείαι: hence γέροντ-ς (γέρων) a person holding such privileges or authority, and γεροντία or γερουσία the ruling Senate at Sparta. The root of the word is gri- "to take" or "receive", one of common occurrence in all the languages of the Indo-Germanic family, and probably the same with hri of which we have said so much in the last chapter (see also p. 200). We do not believe that it is connected with γῆρας, "old age", which seems to be related to the Sanscrit root jri-, (*jarā*) "to wear away", and the use of γέρων, γεραιός, as an apparent synonym for γηραιός, is to be explained from the connexion of the ideas of age and dignity in the Greek mind. In Euripides (*Suppl.* 42),

ἰκετεύω σε, γεραιά, γεραρῶν ἐκ
στομάτων πρὸς γόνυ πίπτουσα τὸ σόν.

We believe that the idea intended to be conveyed by the words *γεραιά* and *γεραρῶν* is not that of age, though both *Æthra* the person addressed, and the chorus who are speaking, are represented as old women, but that of veneration or respect, "I beseech you, O honoured dame, with a mouth paying you due respect, and falling down at your knee." As *γεραρός* is used as an epithet of the person who receives the *γέρας*, so *γεραίρειν* is employed to denote the act of bestowing the *γέρας*, as when a greater share of any thing is given to a distinguished man (Homer *Iliad* vii. 321):

νώτοισι δ' Αἴαντα διηνεκέεσσι γέραιρεν
ἥρως Ἀτρείδης.

or when the worship of a divinity is spoken of (Plato *Legg.* VII. 799 A): *χορείαις ποίαισι γεραίρειν τὴν τότε θυσίαν*. There is no doubt, then, as to the meaning of the adjective or epithet *γεραρός*. But there are two passages of *Æschylus* in which this word is clearly used as a substantive, and in both we have a dative plural. They are *Supplices* 672:

καὶ γεραρῶισι πρεσ-
βυτοδόκοι γεμόν-
των θυμέλαι φλεγόντων θ'
ὥς πόλις εὖ νέμοιτο.

and *Agamemnon* 722:

ἔθρεψεν δὲλέοντα
σίνιν δόμοις ἀγάλακτον
οὕτως ἀνὴρ φιλόμαστον,
ἐν βιότου προτελείοις
ἄμερον, εὐφιλόπαιδα,
καὶ γεραροῖς ἐπίχαρτον.

In consequence of the word *πρεσβυτοδόκοι*, which precedes in the first passage, and *εὐφιλόπαιδα* in the second, every one has been led, not unnaturally it must be confessed, to translate *γεραροῖς* in both passages "the aged men". A little examination will show that the word is in both passages a synonym for *γέρας*. That *γεραροῖς* does not mean "old men" in the first

passage is clear: for how can altars, or rather the terraces round the altar (θυμέλαι: see Müller, *Anhang zu den Eumeniden*, p. 35) be said to be loaded like a ship with freight (γέμειν), and to blaze (φλέγειν) *with old men*? That old men crowded round the altars is sufficiently stated by the epithet πρεσβυτοδόκοι, and the addition of a synonym for πρεσβυταῖς would be very unlike Æschylus. That γεραροῖς does not signify *persons* in the second passage is clear from this, that when ἐπίχαρτος governs a dative case of the person it always has the meaning "rejoiced over as by an enemy": thus Æschyl. *Prometh.* 164, ἐχθροῖς ἐπίχαρτα πέπονθα (see the passages quoted in Blomfield's note); Thucydides, III. 67, οἴκτου δὲ ἀξιώτεροι τυγχάνειν οἱ ἀπρεπές τι πάσχοντες τῶν ἀνθρώπων· οἱ δὲ δικαίως, ὥσπερ οἶδε, τὰ ἐνάντια ἐπίχαρτοι εἶναι; and so ἐπιχαίρω, when it governs the dative, as Soph. *Aj.* 940, οἱ δ' οὖν γελώντων κἀπιχαιρόντων κακοῖς: but when the verb governs the accusative, it expresses merely a simple act of joy, like χαίρω, γηθῶ, &c., with the same government (see Sophocl. *Aj.* 136, and Lobeck), and so ἐπίχαρτος, without a dative of the person, signifies "joy-causing agreeable", as in Sophocl. *Trachin.* 1262, ὥς ἐπίχαρτον τελέουσ' ἀκούσιον ἔργον, where the Scholiast rightly compares the Homeric ἐκὼν ἀέκοντί γε θυμῷ. If, therefore, in the passage of the *Agamemnon* we take γεραροῖς in the sense "by means of gifts", we shall have the natural signification, "the young lion was tame, it gambolled with children, and was agreeable or pleasing, it caressed one—when it was fed", just as he says afterwards (725), παιδρωπὸς ποτὶ χεῖρα σαίνων τε γαστρὸς ἀνάγκαις. That γεραροῖς, in the other passage, means "with sacrificial offerings", is shown by the use of the word φλέγειν (so in the *Agamemnon*, 91, βωμοὶ δώροισι φλέγονται), and by the imitation of the whole passage in the *Electra* of Euripides (712 and following)

χοροὶ δ' Ἀτρειδᾶν ἐγέραιρον οἴκους·
 θυμέλαι δ' ἐπίτναντο χρυσήλατοι,
 σελαγείτο δ' ἀν' ἄστν πῦρ ἐπίβωμιον Ἀργείων.

We conclude, therefore, that in these passages γεραροῖς represents the dative plural of γεραρόν, which has become permanent as a neuter substantive equivalent to γέρας.

We have stated that the etymological distinction between the adjective and substantive is, that the former is generally capable by its inflexions of being attached to substantives of every gender. It will be easy to show that this sole etymological difference is the result of the syntactical use of adjectives. A great number of possessive adjectives are nothing more than genitive cases attracted by juxtaposition into a variety of inflexions. For instance, if, as is most probable, the oldest form of the genitive of δῆμος, δήμοιο, was δημόσιο, what is this in relation to δημόσιος, but the crude form of a new system of inflexions? The same may be said of all such adjectives as χρύσεος from χρυσος, and also of the verb-adjectives or participles: for what difference is there between the indicative τύπτουσι=τύπτουσιν and the imperative τυπτόντων, on the one hand, and the dative singular and genitive plural of the participle on the other? The participle is nothing but the crude form of the verb with a pronominal suffix,—which may or may not be the expression of certain persons of the finite moods,—made the basis of a set of inflexions which, from their capability of fusion or harmony with the analogies of substantives, are used as adjectives. There are many adjectives which are immoveable or not capable of a variety of flexion (Lobeck, *Paralipom.* p. 189), and these, when placed by the side of the noun substantive, constitute it to all intents and purposes one of those compound words in which the genius of the Greek and Sanscrit languages is most strikingly developed, the only difference being, that in the former instance the inflexions of case are preserved, while those of gender are neglected; whereas in the latter the crude form only is prefixed. Most adjectives, however, vary in gender, number, and case with the noun to which they belong, and are either the predicate of the sentence of which the noun is the subject, or stand as the representative of some case (mostly the genitive) of another noun dependent upon the substantive in question, just as, conversely, the genitive case of a substantive may stand as a substitute for an epithet, see Soph. *Antig.* 114, χίονος πτέρυγι for χιονέη; *Electra*, 19, ἄστρον εὐφρονή for ἀστερόεσσα, &c.

From this it will be seen that the use of adjectives at all is entirely logical or syntactical, for an adjective when distinct from the substantive, that is, when not a mere epithet, is a

predicate as contrasted to the subject (above p. 146). Although we do not profess to discuss the syntax of the Greek language in these pages, yet as the very essence of the adjective is syntactical (its etymological distinction being merely an accident), and as its different value, according as it is used with or without the article, is a point which teachers of Greek find it most difficult to impress upon their pupils, we shall indulge in a very few remarks on the subject.

Every noun in the Greek language, however vague and general its signification may be, is capable of forming the subject of a preposition, if it only has prefixed to it that simplest form of the demonstrative, which we call the article; and if two nouns occur in connexion, one of which has, and the other wants, the article, the former is related to the latter as subject is to predicate. This is a fact which must be always kept in mind by every one who would translate the Greek authors correctly. An adjective, in our acceptation of the name, is an epithet of the substantive with which it is joined, and the difficulty which we experience in practically teaching the Greek language is, to convince the learner, that no noun, though with variable gender, can be considered as an adjective when it stands alone, while the substantive to which it refers has the article prefixed, but that it is always a predicate, or asserts something of the noun, even though they should both of them be in oblique cases. Another assertion of the same principle is, that no participle or verbal-adjective in *-ντ*, or *-μενος*, can be considered as an adjective, unless it be subjoined to an article, in which case it is equivalent to the relative pronoun with a finite verb. The difference between the relative and the definite article consists, as we have already seen (p. 318, 319), in this, that the former preserves the subjective form throughout all cases and genders, and has the case-ending in the nominative, whereas the case-ending *s* of the nominative is wanting in the article, because that suffix is appended to the noun with which it is connected, and the element *-τα* is used for the neuter and for the oblique cases of the masculine and feminine. Now the Greek participle active is the pronominal form, which, in the instrumental case, forms the third person plural of the verb, inflected through all its cases and genders, and the participle passive is another pronominal form, which, in the locative, constitutes the infinitive active, similarly inflected. Thus, *τύπτοντι* = *τύπτονσι* means

“striking performed by an indefinite number of persons” = “they strike”, which is merely conditional, for no particular persons are mentioned: whence the idea of striking in general is naturally deduced, and $\tauύπτοντ-s = \tauύπτων$ means “a person who strikes, if there is one” = “if he strikes;” therefore the participle alone implies a condition only. Accordingly, the verb without a nominative and the participle stand on the same footing as mere hypotheses, which are not, though they are capable of becoming, assertions: in other words, they are merely predicates without a subject. In the logical or syntactical condition of the Greek language, they become the predicates of a sentence, when a nominative case (which should properly consist of a noun with the article) is prefixed to the verb, and when some case of a noun (also preceded by an article) is placed in connexion with the participle; the former become an affirmative sentence, the latter a dependent one, expressed in our language by the finite verb with some particle. But both the verb and the participle constitute not the sentence itself, but the subject of it, when we prefix to the former, not the nominative with the article, but the relative pronoun; and to the latter, not the noun and article, but the article alone. Thus, $\deltaς δίδω-τι$ “he who gives” = $\delta δίδοντ-s$ ($\deltaίδους$) “the giver”; and hence it is that the epithet or adjective in the proper sense of the term is equivalent either to the verb with the relative, or to the participle with the article; for $\delta ἀγαθὸ-s ἀνθρωπο-s$ is identical in signification with both $\delta ἀνθρωπο-s \delta-s ἀγαθός-s ἐστιν$, and $\delta ἀνθρωπο-s, \delta εὐποιγόντ-s$ ($\ποιῶν$). So that, in fact, the adjective, which from its variety of flexion, requires the guidance of an article before it can be considered either as an epithet or as a substantive, that is to say, before it can be used as a subject, is to be considered in the same light with the participle, which differs from the verb only in having variable inflexions. Whereas, conversely, when the adjective and participle stand after an article, and unconnected with any substantive, they are substantives to all intents and purposes, for their variation of gender is excluded by the nature of the case, and adjectives or participles, which have been long used in this way, may become regular nouns appellative, like the adjectives in $-κή$, or the word $\gammaεραρόν$, mentioned above, or even proper names, like $Χάρων$, and the patronymics referred to in the last chapter (above, p. 341).

Although all this is obvious enough when stated plainly and directly, and though the fact must be known to every one who has any pretension to the name of a Greek scholar, it is, as we have before said, very difficult to impress the fact upon the young student; we shall, therefore, make no apology for showing by a few examples the application of the principle to the commonest constructions in Greek. We feel the more justified in doing so as even the most eminent scholars have occasionally fallen into mistakes from inattention to this rule, which we consider as the basis of all Greek syntax. Thus Hermann in his edition of Aristotle's *Poetic.* c. IV. § 16, where we have καὶ τὸν λόγον πρωταγωνιστὴν παρεσκεύασε, writes as follows (p. 109): *Sextam tragædiæ formam instituit Æschylus, secundo addito actore, unde primarum partium actor exstitit, quem Aristoteles λόγον πρωταγωνιστὴν vocat, male a Twiningio et Buhlio intellectum.* So that he makes πρωταγωνιστὴν an epithet, whereas it is a predicate, as it is correctly rendered by Twining ("he made the dialogue the principal part of Tragedy"), whose interpretation is adopted by Buhle. In Euripides (*Troades.* 398) we have Πάρις δ' ἔγημε τὴν Διὸς, γημὰς δὲ μὴ σιγώμενον τὸ κῆδος εἶχεν ἂν δόμοις (we adopt Elmsley's reading for εἶχεν ἐν which appears in the common editions), which obviously means "Paris married the daughter of Zeus, but if he had not married her, the alliance he contracted would have been an obscure one." Yet Elmsley (*ad Med.* 416) has not hesitated to approve of the conjecture σιγώμενόν τι κῆδος, proposed by some other person, which makes nonsense of the line, for Euripides does not mean to say that Paris must have married, but that his marriage, if he had married any other person than Helen, would probably have been an obscure one. Again, in Sophocles (*Ajax.* 572),

καὶ τὰμὰ τεύχη μήτ' ἀγωνάρχαι τινὲς
θήσουσ' Ἀχαιοῖς, μήθ' ὁ λυμεὼν ἐμός.

All the editors (except Schäfer who proposes to omit the article) have passed over the solæcism in the last words; and it is even defended by Schneider in his edition of Plato's *Respublica* Vol. II. p. 319. We read ὁ λυμεὼν ἐμοί. The word λυμεὼν stands on the same footing with ἀπατεῶν, &c. It is the weakened form of a participle used as a noun; for as we have ἀπατή, ἀπατάω, ἀπατεῶν, for ἀπατάων, we might have λυμή, λυμάω, λυμεῶν,

for *λυμάων*. The verb *λυμάω* does not exist, nor is the lengthened form *λυμαίνω* used in the active by the best Attic writers; they employ only the deponent *λυμαίνομαι*, which is properly followed by the dative, as we are told by the Scholiast on Aristophanes (*Nub.* 931, *λυμαινόμενον τοῖς μειρακίοις*): *λυμαινόμενον, ἀντὶ τοῦ ἐννυβρίζοντα, οὕτως δὲ αὐτοῖς σύννηθες, οὐχί, τὰ μειρακία λυμαινόμενον, πρὸς ὃ καὶ τὸ χ.* (though Xenophon makes it govern the accusative) and even in the later writers when the active *λυμαίνω* occurs it is construed with the dative, as in Libanius IV. p. 350, *τὰ λυμήναντα τοῖς πράγμασι*. It is, therefore, by no means unlikely that *λυμεών* should be construed with the dative (for such nouns govern the same case as the verbs from which they are derived), and that the ignorant transcriber should not perceive it and write *ἐμός*. A similar solœcism has been remedied by a similar correction in Theocritus XXVII. 58, *τῶμπέχονον ποίησας ἐμοὶ ῥάκος*, where the common editions have *ἐμόν*; the final *ν, σ, ι* are very like one another in the MSS. The most singular blunder of this sort is that which Brunck, Blomfield, and Wellauer have committed in construing *τῆς εὐπραξίας σωτήρος* in *Æschyl. Sept. c. Theb.* 209.

Πειθαρχία γάρ ἐστι τῆς Εὐπραξίας
μήτηρ, γυνὴ Σωτήρος. ᾧδ' ἔχει λόγος

the meaning of which clearly is, "Obedience is the mother of good fortune, and the wife of Jove the Saviour; such is the saying." The last part of the *λόγος* we find in another form in *Soph. Antig.* 676.

τῶν δ' ὀρθουμένων
σώζει τὰ πολλὰ σώμαθ' ἡ Πειθαρχία.

We might bring forward a great many other instances of the ignorance or inadvertance of scholars with regard to this fundamental principle of Greek construction; indeed, the remark which Valckenaer made, when he stated the rule, is still applicable—*credi vix potest quam frequenter in minutis hisce fuerit ab hominibus etiam Græce perdoctis peccatum* (*ad Herod.* I. 180). That English scholars should not have observed this, after the publication of Middleton's elaborate treatise is still more wonderful, for, although that book is based upon a theory opposed to all sound views of the philosophy of language, it at least stated distinctly

enough the rule that the subject is generally found *with* the article and the predicate *without* it (p. 53. foll. ed. Rose).

The following examples will explain to the young student the influence of the article in determining whether a given adjective or participle is to be considered as an ὄνομα, or as a ῥήμα. Ὁ βασιλεύων is a synonym for ὁ βασιλεύς, but βασιλεύων means "during his reign," "when or if he is reigning:" for example, Κῦρος ὁ βασιλεύων, is "Cyrus the king," but βασιλεύων ὁ Κῦρος, "Cyrus, when he was king." Ὁ λευκὸς ἵππος "the white horse," but λευκὸς ὁ ἵππος, "the horse is white." Ὁ φρονῶν is "the wise or prudent man," but Sophocl. *Æd. Tyr.* 316.

φεῦ, φεῦ· φρονεῖν ὡς δεινὸν ἔνθα μὴ τέλη
λύει φρονοῦντι,

means "what a sad thing it is to be wise, in cases where it is unprofitable (does not *pay*) to be wise," so that the participle is equivalent to the infinitive; comp. *Æd. Tyr.* 863. εἴ μοι ξυνείη φέροντι μοῖρα τὰν εὖσεπτον ἀγνείαν λόγων, ἔργου τε παντος, and Lysias (*de eversa republica* p. 174, l. 14.), οὐκ ἄξιον πολλάκις χρῆσθαι συμβούλοις, οἷς οὐδὲ ἅπαξ ἐλυσιτέλησε πειθομένοις. Ἡ βέβαιος χάρις would mean "a lasting obligation," but the Corcyreans say "it is their business to show that their gratitude will be lasting,"—ὡς καὶ τὴν χάριν βέβαιον ἔξουσιν (Thucyd. I. 32.), and thus they tell the Athenians (in the following chapter) "that by receiving as allies people whose dearest interests were at stake, they would confer the favour with as indelible a record as possible," ὡς ἂν μάλιστα μετ' αἰμνήστου μαρτυρίου τὴν χάριν καταθεῖσθε. The following passage contains a good exemplification of the uses of the participle, both as ὄνομα and ῥήμα; Thucydides I. 36. καὶ ὅτω τάδε συμφέροντα μὲν δοκεῖ λέγεσθαι, φοβεῖται δὲ μὴ δι' αὐτὰ πειθόμενος τὰς σπονδὰς λύσῃ, γνῶτω τὸ μὲν δεδιὸς αὐτοῦ, ἰσχὺν ἔχον, τοὺς ἐναντίους μᾶλλον φοβῆσον, τὸ δὲ θαρσοῦν μὴ δεξαμένου ἀσθενὲς ὄν πρὸς ἰσχύοντας τοὺς ἐχθροὺς ἀδεέστερον ἐσόμενον. Here it is obvious that συμφέροντα, πειθόμενος, ἔχον, φοβῆσον, δεξαμένου, ὄν, ἰσχύοντας, and ἐσόμενον, are all predicates, the two futures being equivalent to infinitive moods of the same tense, while τὸ δεδιὸς and τὸ θαρσοῦν are subjects, or equivalent to nouns substantive: the meaning is, "and if any one thinks that what has been said is for his interest, but is afraid lest, if he listens to our arguments, he may be induced to break the treaty,

let him know that his fear, if it brings him strength, will rather be alarming to his enemies, whereas his confidence after having refused our aid will be less formidable, because it will be weak as compared with his enemies, who will be strong." Again, οἱ ἀφεςτηκότες ξύμμαχοι would mean "the revolted allies"; οἱ ἀφεςτηκότες τῶν ξυμμάχων, "those of the allies who had revolted"; but Thucydides, II. 65: ἀντεῖχον τῶν ξυμμάχων ἔτι τοῖς πλείοσιν ἀφεςτηκόσι means "in addition to all their other enemies they kept their ground against the majority of their allies, they having revolted," or "for they had revolted," or "after they had revolted;" not "who had revolted," as some people would translate it. Aristoph. *Eqq.* 280,

ναὶ μὰ Δία κ᾿ἄγωγε τοῦτον, ὅτι κενῇ τῇ κοιλίᾳ
ἐσδραμὼν ἐς τὸ πρυτανεῖον, εἶτα πάλιν ἐκθεῖ πλέα.

"I'll inform against this fellow, for going into the Town-hall with his belly empty, and coming out again with it full;" i.e., his belly was empty when he went in, but full when he came out again. In Sophocl. *Antig.* 360,

ἄπορος ἐπ' οὐδὲν ἔρχεται
τὸ μέλλον,

the Scholiast and Hermann suppose that ἐπ' οὐδὲν τὸ μέλλον ought to be taken together, with the sense ἐπ' οὐδὲν τῶν μελλόντων, but it appears to us that τὸ μέλλον is in apposition to the whole of the preceding line, "in regard to the future, he comes to nothing unprovided with resources." At the beginning of the following strophe, the article is properly explained by Wex. In another part of the same play, the chorus, after stating that, when misfortunes once begin in a family, they go on till the race is extinct, exclaim (v. 594),

ἀρχαῖα τὰ Λαβδακιδᾶν οἴκων ὀρώμαι
πήματα φθιμένων ἐπὶ πήμασι πίπτοντ',
οὐδ' ἀπαλλάσσει
γενεὰν γένος.

which signifies, "the calamities of the house of Labdacus, which I see in the act of being added to the calamities of those members of the family who are dead and gone, are only the old misfortunes resuscitated and revived."

These instances will be sufficient to show the natural connexion of the article with the subject of the proposition. From these cases the student will be careful to distinguish those in which the proposition is convertible or reciprocating, such, namely, "that of either term taken as the subject, the other may be affirmed as a predicate" (Middleton, p. 54). In these last cases, which are, of course, not very numerous, the article either appears before both subject and predicate, as Aristot. *Eth.* II. 9, ἐστὶν ἡ ἀρετὴ ἡ ἠθικὴ μεσότης, or is omitted in both, as in the aphorism of Protagoras, πάντων χρημάτων μέτρον ἄνθρωπος. Matthiæ (*Gr. Gr.* § 264, obs.) quotes some instances, in which he says the predicate has the article, but the subject wants it. In all these, the predicate, as he calls it, is the subject, nor can we conceive the possibility of such a conversion as he supposes.

There are instances, though not very numerous, in which the same word appears by brachylogy both as ὄνομα and as ῥῆμα, in other words, it is written once, but must be repeated twice in the mind: thus we have in Herodotus, VIII. 80, ἴσθι γὰρ ἐξ ἐμέο (ποιούμενα) τὰ ποιούμενα ὑπὸ Μήδων, "be assured that every thing done by the Medes, is done by my advice." Thucydides, VII. 71, διὰ τὸ ἀνώμαλον, (ἀνώμαλον) καὶ τὴν ἔποψιν τῆς ναυμαχίας ἠναγκάζοντο ἔχειν, "on account of the inequality of the ground, the view which they had of the sea-fight from the shore was necessarily unequal also."

CHAPTER VI.

COMPOUND WORDS.

ONE of the most striking peculiarities, and indeed one of the greatest beauties, of classical Greek, is the frequent and varied use of compound words by the best authors. Our own language cannot make the most distant approximation to the Greek in this, the German falls far short of it, the Latin still more so. There is, however, one language of our family, the Sanscrit, which bears a strong analogy to, and even excels, the Greek in this respect; it will be proper, therefore, before we engage in an inquiry about the principles which regulate the formation of compound words in Greek, to consider the laws according to which this process is carried on in the old language of India.

A person not well skilled in Sanscrit always experiences great difficulty in distinguishing the words in a line of poetry from one another: the whole line will appear to him to be formed into one mass, the end of every word being altered, on euphonical principles, to suit the commencement of the word which follows; in fact, as Colebrooke has remarked (*Asiatic Researches*, VIII. p. 201), it is an euphonical orthography, which consists in extending to syntax the rules for the permutation of letters in etymology. The same is observed to a certain extent in old Greek inscriptions (Böckh, *Corpus Inscript.* I. p. 126). The feeling which gave rise to this orthographical anomaly, and certainly to the formation of the long compounds also, may be traced in the peculiarities of Greek syntax; for instance, that construction which we call attraction is the simple effect of a striving after brachylogy, of the attempt to compress the meaning of a sentence into a closely connected group of words. The only distinction, between a real compound and syntactical phenomena like this, is that in the compound the separate words have so entirely coalesced that the inflexion of the last word alone is regarded.

The Sanscrit grammarians have discriminated six kinds of compound words or *samāsa*. They give the following names to the different species (see Wilkins' *Grammar*, p. 556, foll.) (1) *avyayībhāva*, (2) *tatpurusha*, (3) *dvandva*, (4) *dvigu*, (5) *bahubrīhi*, (6) *karmadhāraya*. We shall consider these one after the other.

1st class; A compound of this kind has an indeclinable word for the first member, and for its last a noun terminating in the sign of the neuter gender; it is generally indeclinable: for instance, *nirmakṣikaṇ*, "without flies", from *nir*, "without", and *makṣika-s*, "a fly". A similar compound in Greek would be *ἐνεκα*. Sometimes, however, the substantive appears in the instrumental or locative case, like *ἐνεκεν*; thus we may write either *upa-kumbhan*, or *upa-kumbhēna kṛitaṇ*, "done by the jar", and either *upa-kumbhaṇ*, or *upa-kumbhē nidhē-hi*, "place it in the jar". This looks very like the government of a case by a preposition, which the Sanscrit grammarians repudiate, but of which we have found other similar instances: thus in the *Rāmāyana* (Lib. II.) we find *nanu tē aham prānēbhyō 'pi priyā*, "am I not dear above your life?" *priyā api* (ἐπι) *pranēbhyas*, for *priyatarā pranēbhyas*, like *vitā super cara* for *vitā carior*. Again, the *avyayībhāva* compound appears exactly like a compound adjective, agreeing with its substantive: thus close by the passage just quoted we have, in two following *ślōkas*, *sa-bhāryas*, "with my wife", in the nominative case, and *tam aham sparṣayāmāsa sa-bhāryam* (accus. agreeing with *tam*) *patitam* (πessόντα) *sutam*, "I made him, together with his wife, touch his fallen son".

2nd class, or *tatpurusha*; these compounds are formed of two or more nouns, the first set being in some oblique case, governed by the second, which may be a substantive, an adjective, or a participle in *-ta*: the following are instances, *rāja-purusha*, "a king's man", *hasty-aṣva-ratha-ghēsha*, "the noise of elephants, horses, and chariots", *svarga-patita*, "fallen from heaven". These correspond, of course, to the Greek compounds *ἐγχεσίμωρος*, *θεοσ-εχθρία*, *παρθενοπίνης*, &c.

3rd class, or *dvandva*; this class forms substitutes for collections of nouns in the same case and joined together by a

copulative conjunction. The last noun alone is declined, and is (1) in the dual or plural number according as two or more nouns are joined together; or (2) it is a neuter singular, showing that the aggregate is considered as one: thus (1) *guru-çishyâu*, “master and scholar” (dual); *brâhmana-kshatriya-vit'-çûdrâs*, the names of the four Indian castes (plur.): (2) *chhatrôpânaham* (*chhatra*, *upânah*), “parasol and shoe” (neut. sing.). The Greeks do not distinguish the dual, but *dvandva* compounds are not uncommon in Aristophanes; see, for instance, the long word with a collective ending in the *Ecclesiazusæ* (1169 foll.), and proper names like *Τισαμενο-Φαίνιπποι* (*Acharn.* 603).

4th class, or *dvigu*. Collectives, of which the first part is a numeral, belong to this class; the noun is either feminine in *î*, or neuter in *ã*: thus, *tri-râtra*, “three nights”, *tri-lokî*, “three worlds”. The Greeks have no *dvigu* compounds, unless we can consider adjectives like *δίδραχμον*, *χιλιοναύτης*, &c., as belonging to the class.

5th class, or *bahubrîhi*. In this class are contained compound adjectives; the last part is a substantive, the first is any other part of speech. The following are instances, *mahu-dhanas*, *-â*, *-an*, “rich”, from *mahu*, “much”, and *dhana*, “wealth”; *bahu-padas*, “having many feet”; *mahu-mântangan vanañ*, “a forest with many elephants”. These compounds are very common in Greek, as *πολύπους*, *φιλόκαλος*, &c.

6th class, or *karmadhârya*. This class forms compounds, of which the last part is a substantive or adjective, modified in meaning by some preceding adjective in an uninflected state. Thus, *mahârâjas*, “a great king”; *para-mâha*, “a fine day”; *su-mahat* (*εὖ μέγας*), “very great”. The interrogative *kin* is also used in this sort of compound as an expression of contempt: as *kinvîra*, “what a hero!” The *karmadhârya* compounds in Greek are mostly proper names, as *Ἱεροσόλυμα*, *Μεγαλόπολις*: in the poets, however, we often find them, as common epithets, thus we have *ὀρθόμαντις* for *ὀρθος μάντις*, *σιδηρομήτωρ* for *σιδήρου μήτηρ*, &c.

Greek grammarians distinguish between two sorts of combination: the one synthetic or organic—*κατὰ σύνθεσιν*; the other parathetic or unorganic—*κατὰ παράθεσιν* (*Apollon. Dyscol. Syn-*

tax. p. 310 Bekk.). The former is when words are so combined that the first of them loses all inflexion, and the last word is the pivot of the meaning: the latter is when both words retain their inflexion, but are joined together so intimately and habitually that they may be written as one word. The parathetic compound is a natural prelude to synthetic combination, and we sometimes find words oscillating between the two sorts of composition. Regular parathetic compounds are often found in proper names, as *Κυνόσσημα*, *Ἡλιόυπολις*; in particles, as *οὐκέτι*, *τοπρώτον*; or in epithets as *ναυσι-κλυτος*, *τειχεσι-πλήτης*: or we find that, although the two words are not absolutely melted down into one, the former has suffered some modification in its vowels on account of the weight of the word, so that neither part could stand alone: such words are *σακεσ-πάλος*, *μελεσί-πτερος*, *τελεσ-φόρος*, *όδοι-πόρος*, and a number of words compounded with *θεος-* for *θεοῖς* (Pott, *Etymol. Forsch.* I. p. xxxviii. Rosen, *Journal of Education*, IX. p. 334), such as *θεοσ-εχθρία*, *θεός-δοτος*, *θεοσ-κυνή*, *θέσ-κελος* (*θεοῖς ἵκελος*), *θέσ-πισ*, *θεσ-πέσιος*, *θεσ-πι-έπεια* (in which the root *επ-* occurs twice, so that the word means "saying again what was said to her by the gods"), *θεσ-πρωτός* (*θεοῖς πεπρωμένος*), *θεός-συτος* (*ἐκ θεοῦ ὀρμηθεῖσα Schol. ad Æschyl. Prom.* 116), *θέσ-φατος*, *θεσ-πιαί*, *θίς-βη*, &c. In *ένεκα*, *φροῦδος*, &c. the breathing only of the first part is affected: in *βός-πορος*, *ῥσ-πορος*, *λυκόσ-ουρα* we have abbreviated forms of the old genitive. We must take this opportunity of pointing out two passages which have been erroneously interpreted, in consequence of a misunderstanding of a parathetic compound, which occurs in both. The passages are: Pindar, *Pyth.* XI. 32.

θάενεν μὲν αὐτὸς ἥρως Ἀτρεΐδας
ἵκων χρόνῳ-κλυταῖς ἐν Ἀμύκλαις.

and Æschylus, *Choëph.* 641.

τέκνον δ' ἐπειςφέρει δόμοισι,
δωμάτων παλαιτέρων
τίνειν μύσος,
χρόνῳ-κλυτὴ βυσσόφρων Ἐρινύς.

In both of these passages the commentators take *χρόνῳ* by itself, as signifying "after a long absence", "at last". Pindar, however, would hardly have used *χρόνῳ* in this sense, as he says

immediately afterwards *χρονίῳ σὺν Ἄρει* (v. 36), and this meaning in the line of Æschylus would leave no tolerable sense for *κλυτή*. But *κλυτός* is constantly used in parathetic compounds, as *ναυσίκλυτος*, *δουρικόλυτος*, &c. implying merely eminence in that which is expressed in the dative case preceding. Now the particular always considered as most remarkable in Amyclæ is its extreme antiquity, and the Erinyes are especially in this very trilogy of Æschylus distinguished from the other deities by their greater age (see *Eumen.* 701, 748, 810 and comp. *παλαιόφρων*, *Eumen.* 833, with *βυσσόφρων* in this passage: also Müller, p. 181). Therefore, *χρονόκλυτος*, as it should be written, signifies only "time-honoured" or "ancient" in both places. A verb combined with a preposition is not only a parathetic, but also a separable compound: at least in the older state of Hellenism they could always be parted by tmesis; when, however, a verb combined with the preposition assumes a secondary derivative form, the compound becomes synthetic, and such words as *σύνοικος*, *ἐπίκουρος*, *σύνδουλος*, &c. are one and indivisible, as indeed appears from the way in which the accent is thrown back (*Apollon. ubi supra*).

In treating of the synthetic compounds we will first take those which have the verb element in the last place, and then those which begin with a verb. When two nouns are joined together we find them connected by the short vowel *ο*, which is elided when the second word begins with a vowel: where the first word ends in *ι* or *υ* these vowels generally keep their place before consonants: the same remark applies to *αυ* and *ου*, and, in certain cases, to the liquids *ν* and *ρ*. When the first noun has two pronominal elements affixed to the root the latter is frequently dropt. This is particularly the case with nouns ending in *μα-τ-*; thus we have *αἰ-μο-σταγής*, for *αἰ-μα-το-σταγής*, *στο-μ-αλγία*, for *στομα-τ-αλγία*, &c. After the compound word had become so well established in use, that its individuality was alone considered, and its separate parts forgotten, the fineness of the Greek ear induced certain euphonical changes made with a view to blending the elements into one mass. This generally took place at the point of junction, but, according to the principle before laid down with regard to the change of place in the aspirate, this euphonical change was shifted to different syllables according to the length and general weight of the word. One of the common changes was that repetition of a liquid, of which we have

before spoken: this was always the case with the ρ , as in $\pi\epsilon\rho\acute{\iota}\rho\omicron\sigma$, $\acute{\iota}\sigma\acute{\omicron}\rho\rho\omicron\sigma$, &c.; it also occurred very frequently with the other liquids, as in $\acute{\alpha}\pi\omicron\lambda\lambda\acute{\eta}\gamma\epsilon\iota\nu$, $\acute{\iota}\pi\pi\omicron\mu\acute{\epsilon}\delta\omega\nu$, $\Pi\alpha\rho\theta\epsilon\nu\nu\omicron\pi\alpha\acute{\iota}\omicron\sigma$, $\acute{\alpha}\lambda\phi\epsilon\sigma\sigma\acute{\iota}\beta\omicron\iota\alpha$. In a compound like $\acute{\iota}\pi\pi\acute{\omicron}\delta\alpha\mu\omicron\sigma$ euphony might require a lengthening of one of the three last short syllables, and as this could not take place at the junction, where there was no liquid, it is passed on to the liquid μ in the next syllable, and thus we find $\acute{\iota}\pi\pi\acute{\omicron}\delta\alpha\mu\mu\omicron\sigma$ (see above, p. 299). This euphonic lengthening, however, most frequently happens at the first syllable of the second part of the word, where we often find an α or ϵ changed to η , and $\omicron$ to ω , as in the following instances, $\epsilon\acute{\upsilon}\eta\nu\epsilon\mu\omicron\sigma$ ($\acute{\alpha}\nu\epsilon\mu\omicron\sigma$), $\delta\upsilon\sigma\acute{\eta}\rho\epsilon\tau\mu\omicron\sigma$ ($\acute{\epsilon}\rho\epsilon\tau\mu\omicron\sigma$), $\sigma\upsilon\nu\acute{\omega}\nu\upsilon\mu\omicron\sigma$ ($\acute{\omicron}\nu\omicron\mu\alpha$), &c. In some compounds it is a matter of indifference whether we lengthen this joining syllable or some other: thus we may say indifferently $\acute{\alpha}\nu\acute{\eta}\rho\iota\theta\mu\omicron\sigma$ or $\acute{\alpha}\nu\acute{\alpha}\rho\iota\theta\mu\omicron\sigma$. A case of the same kind is the lengthening of the first vowel of a compound or derivative word, as $\eta\nu\omicron\rho\acute{\epsilon}\eta$ ($\acute{\alpha}\nu\acute{\eta}\rho$), $\acute{\omega}\lambda\epsilon\sigma\acute{\iota}\omicron\iota\kappa\omicron\sigma$, &c., and to this case also the last mentioned variation applies; thus we have both $\acute{\eta}\lambda\upsilon\sigma\iota\varsigma$ and $\acute{\epsilon}\lambda\epsilon\upsilon\sigma\iota\varsigma$ (Buttmann, *Ausführl. Sprl.* § 120, *Anm.* 1). These vowel changes fall under the head of *guna*; before β and π however we often find *anusvāra*, as in $\tau\acute{\upsilon}\text{-}\mu\text{-}\pi\alpha\nu\omicron\nu$, $\pi\epsilon\iota\sigma\acute{\iota}\text{-}\mu\text{-}\beta\rho\omicron\tau\omicron\sigma$, $\acute{\omicron}\text{-}\mu\text{-}\beta\rho\iota\mu\omicron\sigma$, &c. When the second part of the compound does not begin with either a liquid or a vowel, we find the final vowel of the first part, which should properly be a short $\omicron$, the medium weight of $\acute{\alpha}$, converted into η or $\bar{\alpha}$, and that too, not only in the case of nouns of the first declension as $\chi\omicron\eta\phi\acute{\omicron}\rho\omicron\sigma$, $\acute{\alpha}\gamma\omicron\rho\bar{\alpha}\nu\omicron\mu\omicron\sigma$, but also in nouns of the second and third declensions, as $\theta\alpha\nu\alpha\tau\eta\phi\acute{\omicron}\rho\omicron\sigma$, $\pi\omicron\lambda\iota\bar{\alpha}\nu\acute{\omicron}\mu\omicron\sigma$, another proof that ϵ , $\omicron$ are distinguished from α by difference of weight only. This *guna* also appears under the form $\epsilon\iota$, or $\omicron\iota$, as in $\acute{\alpha}\nu\delta\rho\epsilon\iota\phi\acute{\omicron}\nu\tau\eta\varsigma$, $\acute{\omicron}\delta\omicron\iota\text{-}\pi\acute{\omicron}\rho\omicron\sigma$.

When we say that some synthetic compounds begin or end with a verb, we must be understood as meaning, that they contain the root of a verb, or rather the crude form of a verbal substantive. It cannot be too strongly impressed upon the student's mind, that verbs are never directly compounded with any thing but prepositions, in which case they are separable compounds. All apparently compound verbs are derivatives from compound substantives, of which the last part is a verbal root.

Thus, from βάλλειν is formed the verbal βολή, from λίθους βάλλειν the compound verbal λιθοβόλο-s, and from this again the derivative verb λιθοβολέ-ω. According to the accentuation, such a word as λιθοβόλος might mean either “a person who pelts” or “a person who is pelted” with stones; that is, according as the accent is on the verbal element or not. Thus, μητροκτόνος would apply to Orestes who killed his mother, but μητρόκτονοι to the children of Medea who were slain by their mother. There are exceptions to this: for instance, we find ὁμόσπορος proparoxytone when applied to Jocasta as the wife both of Œdipus and Laius (*Œd. Tyr.* 260), and to Œdipus himself, as the husband of the same wife with his father (460): in both cases as a synonym of ὁμόγαμος (*Eurip. Herc. f.* 339), and of ὁμογενής (*Œd. Tyr.* 1361); though it is obvious that this accentuation is only applicable when the word signifies “a brother” or “sister”, as in *Trachin.* 212, βοᾶτε τὰν ὁμόσπορον Ἄρτεμιν Ὀρτυγίαν. A similar want of accentual distinction is found in the word ἐπώνυμος, which means not only “receiving a name from” (as in *Herod. IV.* 184, ἐπὶ τούτου τοῦ οὔρεος (τοῦ Ἄτλαντος) οἱ ἄνθρωποι οὗτοι ἐπώνυμοι ἐγένοντο· καλεῖνται γὰρ δὴ Ἄτλαντες); but also “giving a name to”: compare *Soph. Œd. Tyr.* 210, τᾶσδ’ ἐπώνυμον γὰρ οἰνῶπα Βάκχον εὔιον, with *Trachin.* 510, ὁ δὲ Βακχίας ἀπὸ ἦλθε—Θήβας. Instances are numerous in which compounds terminating with verbals, and having only one, and that an active signification, are nevertheless consistently proparoxytone: such words are ἱππόδαμος, ἡνίοχος, &c. It is to be remarked that words compounded with εργο- are oxytone when they signify a bodily action, thus, we have λιθουργός, γεωργός, &c.: but proparoxytone, or by contraction properispome, when they denote merely an operation or habit of the mind, and thus we have πανούργος, παντούργος, &c. Exceptions to this rule are found in ραδιουργός, λιτουργός, λεωργός, which last is a synonym of λιτουργός, and derived from λεώς, not from λέως, as Hermann suggests (*ad Soph. Antig.* 1261).

When the first part of the compound is a verb-root, it generally appears under the form of a verbal in -σι-, as in ἐγερσίχορος, λυσίπονος, &c.; or the vowel is elided, as in ῥίψασπις, πλῆξιππος. Very frequently, however, the shorter verbal form in η is preferred, the crude-form of which ends in ε; as in

ἀρχέ-κακος, δακέ-θυμος, &c.; or with elision, as in φέρασπιν, where we have the lighter vowel ε instead of the ο, which we find in the lighter form φορά. Sometimes the connecting vowel is ο or ι, as in φυγό-μαχος, ἀρχι-θέωρος. It is difficult to explain forms like λειπο-ταξία, φαινό-μηρις, in which the strengthened form of the present tense is preserved, otherwise than by supposing that, in these words, a particular stress was intended to be laid on the verbal part of the word. Forms like ταμεσί-χρως, φερέσ-βιος are purely poetical.

On the terminations of compound words, we must refer the reader to Lobeck's *Parerga* (*ad Phrynich.* p. 487, foll.), as we do not mean to add any thing to what we have said on terminations in general. It will be better in this place to discuss, with some minuteness, three compound words, which have given much trouble to philologists, and which are respectively of great interest in the literary, political, and philosophical history of Greece: these three words are διθύραμβος, καλοκαγαθός (along with which we shall consider the other Greek words of a cognate meaning), and ἐντελέχεια.

(1) Διθύραμβος. We have before expressed our opinion with regard to this much disputed word, but as we were then obliged to confine our remarks to the limits of a note, we may be permitted to repeat them here, in a more expanded and systematic form.

In analyzing a word which we do not understand, but which belongs to a language, the etymological principles whereof are reducible to order and system, the first step naturally is to discover what is the termination of its crude form, if it has any constant pronominal affix between the root and the case-ending; if not, whether there is any compound word, the last part of which corresponds to the word in question. Now, although the ending of διθύρ-αμβος does not coincide with any of the pronominal suffixes which we have mentioned above, there are two words which are strikingly analogous to it in termination, namely, ἵαμβος and θρί-αμβος. It is incumbent on us, then, in the first place, to inquire what is the force of the termination -αμβος. Nothing is more common in Greek than the insertion of μ before labial-endings. It seems to be a sort of *anusvāra* insertion, which is peculiarly agreeable

to the Hellenic ear. The following instances will make the fact sufficiently evident. We have *θά-μ-βος* as well as *θαῦ-μα* (*θαῦμα*), *τέ-θηπα*; *θρό-μ-βος* as well as *τρέφ-ω*; *κόρυ-μ-βος* as well as *κορυ-φή*; *κό-μ-πος* (e. g. *ὀδόντων*) as well as *κόπ-τω*; *κύ-μ-βος*, Sanscrit *kumbha*, as well as *κύπ-τω* and *κυφ-ός*; *στρο-μ-βος* as well as *στρέφω*; and in Homer (*Odys.* iv. 84), a certain people are called *Ἐρεμβοί*, probably the Indians, as the Scholiast writes: *οἱ δὲ τοὺς Ἰνδοὺς παρὰ τὸ ἔρεβος, μέλανες γὰρ, ὅθεν καὶ Κράτης Ἐρέμνους γράφει*. If so we may compare the word with *ἐ-ρέφ-ω*, *ὀ-ρφ-νός*, *ὀ-ρφα-νός*, *ἔρεμνος*. By a similar insertion of *μ*, *ἴα-μ-βος* is formed from the root of *ιάπ-τω*, but not with the secondary meaning, which some people have given to it, namely, that of satirizing and abusing, as Sophocles says (*Ajax*, 496), *λόγοις ἰάπτειν τινά*, “to make a person the butt of one’s jeers” (comp. *θένειν ὀνείδει*, *Æschyl. Sept. c. Theb.* 388). It was first pointed out by Lobeck, that the verb *ιάπτω* is merely another form *ἄπτω*, “to join”, in which sense it is used of joining hands in the dance, or of the dance generally, as in Sophocles (*Ajax*, 700):

*φάνηθ', ὦ θεῶν χοροποί' ἄναξ,
ὅπως μοι Νύσια Κνώσι' ὀρχήματ'
αὐτοδαῇ ξυνὼν ἰάψης.*

The authorities which Lobeck has collected in his note on this passage leave no doubt whatever as to the fact, that *ιάπτειν* is here used in the same sense in which we have *χορὸν ἄπτειν* (*Æschyl. Eumenid.* 307), *χεῖρα χειρὶ συνάπτειν* (*Aristoph. Thesmoph.* 995), and *nectere brachia* (*Ovid, Fast.* VI. 329). That *ιάπτειν* was used as a synonym for *ἄπτω*, appears from the words of Hesychius, *Ἰαψεν. ἔπεμψεν. ἔβαλεν. ἔδωκεν. ἔδησεν*, where the editions wrongly read *ἔδεισεν*: compare Heysch. *ἄψω. προσεγγίσω. δῆσω. Κρατῖνος*. That the ideas of “joining,” “touching,” “throwing at,” &c. are related, needs no proof; it is sufficiently clear from the use of *μετὰ* to signify both “with” and “following after”: and that the *ι* may be prefixed, even when another form of the word wants the aspirate, is established by the instances which Lobeck quotes: namely, *αὔω, ἰαύω; αἶβοι, ἰαίβοι; ἀπάλλω = ἀποπέμπω* compared with *ιάλλω*, and *ἐφ-ιάλτης = ὁ ἐπιπηδῶν; ἄειρε, ἰάειρε = πρόσφερε; ἰῶλκα = αὔλακα; ἠδόναι, ἰηδόνες = εὐφροσύναι; οὔρος, ἰωρός; ἄνθος, ἰονθος; ὠκός,*

ἰωκή; θώμη, ἰθώμη; θύω, ἰθύω. Compare also the Persian *yâften* with the Sanscrit root *ap-*. In the sense "to kindle," "to set on fire," we may compare ἄπτω with δέω "to bind," and δαίω "to burn," with δῆμος and δημός, and with the English phrase, "to catch fire." From all this, we conclude that ἰαμβος, or ἄμβος, is simply a word designating a procession or dance of people in close order, and, by implication, a song or hymn performed by such a body.

Having now ascertained the value of the termination, we proceed to investigate the rest of the word. It appears that Διθύραμβος is not only a name of Bacchus, the god in whose honour the song or hymn was chanted (Eurip. *Bacch.* 526), but also a very common proper name (comp. Herodot. VII. 227, with Ælian, *Var. Hist.* VI. 2). We believe that in this use it was only an epithet derived from the song, the subject of which was originally the birth of Bacchus (Διονύσου γένεσις . . . διθύραμβος λεγόμενος, Plato, *Legg.* III. p. 700 B), and we think the following considerations will show that the name itself properly refers to this mythological incident. The old legend states, that Bacchus, as soon as he was born, was surrounded with ivy-boughs, and so prevented from sharing in the fate of his mother. Thus Euripides says (*Phœniss.* 650) :

Βρόμιον ἔνθα τέκετο
μάτηρ, Διὸς γάμοις,
κισσὸς δὲν περιστεφῆς
ἐλικτὸς εὐθὺς ἔτι βρέφος
χλοηφόροιςιν ἔρνεσιν
κατασκίοισιν ὀλβίσας ἐνώτισε,
Βάκχιον χόρευμα
παρθένοισι Θηβαίοισι
καὶ γυναιξὶν Εὐβαίαις.

We look upon this passage as an approximate explanation of the word Διθύραμβος. The Scholiast says: ὄντινα Διόνυσον κισσὸς ἔξωθεν περιπλακεὶς ἔτι βρέφος ὄντα κατὰ τοῦ νώτου ἐκάλυψεν. ιστορεῖ γὰρ Μνασέας, ὅτι, Καδμείων βασιλείων κεραυνωθέντων, κισσός, περὶ τοὺς κίονας φυεὶς, ἐκάλυψεν αὐτὸν ὅπως μὴ αὐθήμερον καὶ ἐν μηδενὶ τὸ βρέφος διαφθαρῇ καλυφθὲν κισσῷ. διὸ καὶ περικίονιος ὁ θεὸς ἐκλήθη παρὰ Θηβαίοις. The following are further

illustrations of the tradition, that the young Bacchus was enveloped in ivy. Homer, *Hymn XXV.* 9,

αὐτὰρ ἐπειδὴ τόνδε θεαὶ πολύμνον ἔθρεψαν,
δὴ τότε φοιτίζεσκε καθ' ὑλήεντας ἐναύλους,
κισσῶ καὶ δάφνῃ πεπυκασμένος.

Nonnus, *Dionysiaca*, IX. 11,

τὸν μὲν ὑπερκύψαντα θεηγενέος τοκετοῖο
στέμματι κισσήεντι λεχωΐδες ἔστεφον ὦραι,
ἔσσομένων κήρυκες.

Philostratus, *Imag.* I. c. 14, ὁ δὲ Διόνυσος τῆς μὲν μητρὸς ἐκθρώσκει, ῥαγείσης τὴν γαστέρα, τὸ δὲ πῦρ ἀχλυῶδες ἐργάζεται, φαιδρὸς αὐτὸς οἶον ἀστήρ τις ἀστράπτων. διασχούσα δὲ ἡ φλόξ ἄντρον τι τῷ Διονύσῳ σκιαγραφεῖ, παντὸς ἡδίου Ἀσσυρίου τε καὶ Λυδίου. ἑλικές τε γὰρ περὶ αὐτῷ τεθήλασι, καὶ κιττοῦ κόρυμβοι, καὶ ἡδὴ ἄμπελοι καὶ θύρσου δένδρα, οὕτω τι ἐκούσης ἀνάσχοντα τῆς γῆς, ὥς καὶ τῷ πυρὶ εἶναι ἓνια. As it is stated that the Dithyramb was a song relating to the birth of Bacchus, and as it appears that, according to the tradition, the infant god was surrounded with ivy, it would not be unnatural to seek for some connexion between the θύρσος, or ivy-staff of the Bacchanalians, and the Dithyramb, which Simonides of Ceos calls κισσόφορος (*fragm.* 205. *ed.* Schneidewin). The word θύρ-σος evidently consists of the root θυρ = θρυ, or θρι, and the termination -σος, on the analogy of πυρ-σός. This termination, we have seen, implies a collection, as in ὄ-σος, θία-σος, &c. Now the θύρ-σος was a light staff, surrounded with ivy and vine-branches, and terminating in a pine cone; i. e., θύρσου χλοερὸν κωνοφόρον κάμακα, as the epigram aptly describes it. It would be necessary, in order to explain fully the significance of this symbol, that we should investigate the whole question of the worship of Bacchus. As this would be foreign to our present object, we shall merely mention, that Bacchus or Dionysus, as the Sun-god, coincides with the old Hermes of the Phoenicians; as the god of generation with both Hermes and Priapus, whence the symbol of the Phallus used in his worship. Like Hermes, he also presided over the friendly intercourse of strangers with one another, as Diodorus says, III. c. 64, (τὸν Διόνυσον) πανταχοῦ πανηγύρεις ἄγειν καὶ μουσικοὺς ἀγῶνας συντελεῖν, καὶ τὸ σύνολον συλλύοντα τά τε νείκη τῶν

ἔθνῳν καὶ πόλεων ἀντὶ τῶν στάσεων καὶ τῶν πολέμων ὁμόνοιαν καὶ πολλήν εἰρήνην παρασκευάζειν; and he is expressly represented as a travelling god, surrounded by attendants bearing *thyrsi* (Diodor. *ubi supra*). In the oldest ages of Greece, when a stranger came to the coast, or in general one person applied to another for protection or hospitality,—and both these classes were designated by the same name, ἰκέτης “the comer,”—it was customary for the suppliant to bear in his hand an olive-bough, surrounded with woollen bands. And thus the Danaides are introduced by Æschylus (*Supplices ad initium*) as singing, on their arrival in Greece:

Ζεὺς μὲν ἀφίκτωρ ἐπίδοι προφρόνως
 στόλον ἡμέτερον—
 τίν' ἂν οὖν χώραν εὖφρονα μᾶλλον
 τῇσδ' ἀφικοίμεθα
 σὺν τοῖσδ' ἰκετῶν ἐγχειριδίοις
 ἔριοστέπτοισι κλάδοισιν;

Nothing could be more natural than that a person landing on a strange coast, where every foreigner was expected to be a pirate, or, generally, an enemy, and was consequently received and treated as such, should seek for some symbol of peace, some token which would prove to the inhabitants of the country that his intentions were friendly. The most obvious symbol would be the bough of some tree, the one preferred being of course some one of sacred use, the olive for instance, and as fillets of wool were generally employed in the religious rites of the Greeks, it would not be unnatural that they should add these to the bough. In the course of time, when the conventional sign was better understood, they would carry with them a white or gilded staff, which they would surround with wool or foliage, as the occasion served. “This,” says Böttiger (*Amalthea*, I. p. 111), “is the proper and original *κηρύκειον*, the staff of Hermes and the herald, and the only one which occurs in the oldest writings and statues. By degrees, several slight alterations were introduced. In common use the green bough was confined to the suppliants for purification. Wound round the staff it becomes the Bacchic thyrsus. The bands, however, remained; only they did not flutter round at random; they were tied up into two bows or loops, and these bows gave rise to the idea of two serpents tied into

a knot and looking towards one another." Hence, the Romans called the symbols of the suppliant *supplicia*; Sallust. *Jugurth.* c. 46, *legatos ad consulem cum suppliciis mittit*. These *supplicia* were boughs of some sacred tree (*verbena*) bound (*supplicata*) round a staff, so that *supplicare* does not mean "to bend the knee," but is derived from these bandages on the suppliant's staff. This connexion with the *caduceus*, or symbol of peaceful intercourse between strangers, is, however, only a part of the significance of the thyrsus. Bacchus was not only a travelling god and the god of travellers, but also the god of generation; and it is natural to suppose that his peculiar symbol would have reference to the singular legend about his birth. The thyrsus was of two kinds: it was either a staff surmounted by a cone and surrounded with ivy, in which case we might suppose that it was a rude imitation of Bacchus Pericionius, the staff representing the body, and the cone the head of the infant god; or it was a bare staff surmounted by a cone which is wrapped up in leaves, in which case we must adopt the explanation of Eustathius (p. 84), that it was the heart of the embryo God which was carried to Jupiter by Pallas—τὴν τοῦ ἀμβλώματος καρδίαν ἤνεγκε (Πάλλας) τῷ Διὶ—and must, therefore, suppose that this heart was represented by the cone of the thyrsus. According to this latter view, which we now regard as the true one, the staff and cone constituted the *thyrsus*, or emblem of the birth of Bacchus: the ivy round the staff or νάρθηξ was perhaps an adjunct borrowed from the περὶ κίονας φυεῖς of the legend, and also imitative of the olive bough round the wand of peace. We consider the root of θύρ-σος, namely, θυρ- = θρυ- or θρι-, to be the same as that which we find in θρίον. The words θριόφορος and θριόβολος are used as synonyms to θυρσόφορος, and θρίαμβος appears in the same sense as διθύραμβος, so that it is at least probable that the elements θρι- and θυρ- found in these words respectively, are in fact, as they may be according to the laws of etymology, one and the same. Now the word θρίον or θρίον means "a leaf of the vine or fig," and "an olio wrapped up in such leaves." Hesychius: θρία. φύλλα συκῆς ἢ ἀμπέλου· καὶ τὰ ἐν αὐτοῖς δεσμούμενα βρώματα. It is connected with the numeral τρεῖς,—just as θρίναξ stands as a synonym for τρίαῖνα,—and points, in this application, to the shape of the vine and fig-leaf. For this reason, perhaps, the

Cretans called the vine *θρινία*; Hesychius: *θρινία. ἄμπελος. ἐν Κρήτῃ*. In the plural, *θρίος* means the three stays (*ἐκφοροί*) going from the topmast to each side of the ship and to the bow-sprit. The third pronoun appears still more obviously in the reduplicated synonym *τέρ-θριος*. In its application to the thyrsus, this word points to the mystical number "three" (Böttiger, *Amalthea*, I. p. 107), which is also referred to in the epithet *τριπέτηλος* applied to the mystical wand which Apollo gave to Hermes: Homer, *Hymn. in Mercur.* 530,

αὐτὰρ ἔπειτα

ὄλβου καὶ πλούτου δώσω περικαλλέα ῥάβδον,
χρυσείην, τριπέτηλον, ἀκήριον, ἥ σε φυλάξει,

and perhaps also in the epithet *τρικέφαλος* applied to Hermes (Harpocration, s. v. p. 334. *Etymol. Magn.* s. v. p. 694). If, then, *θύρ-σος* is connected with *θρίον*, it will signify "a gathering of three leaves, and that which they contain, at the end of a rod," just as *πυρ-σός* denotes "a torch," i. e. "a gathering of fire at the end of a piece of wood." The quantity shows that the first syllable of *Δι-θύραμβος* is a contraction of *Διᾶ* like that of *Δι-πόλια* and *Δι-φίλος*, and thus the whole word will signify "a chorus or song celebrating the birth of Bacchus," i. e. "the bringing to Jupiter of the *θρίον* or leaf-enveloped heart or body of the god." The termination, as we have explained it above, is particularly applicable to the dithyramb, which was performed by a chorus of fifty persons dancing hand in hand (*ἀλλήλων ἐπὶ καρπῷ χεῖρας ἔχοντες*, Homer, *Iliad* xviii. 594) round a blazing altar in honour of the sun-god.

It is right to mention an explanation of the thyrsus adopted by some of the more recent Greek writers and by the Roman poets. They supposed that the thyrsus was a spear concealed in ivy, or having the point covered by the cone: thus Justin Martyr (quoted by Schneider), ὥσπερ αἱ βάκχαι διὰ σχήματος εἰρηνικοῦ τὰς λόγχας ἐν τοῖς θύρσοις περιφέρουσι. Catullus, LXIV. 257,

Horum pars tecta quatiebant cuspidē thyrsos.

Seneca, *Herc. fur.* (quoted by Schneider),

Tectam virenti cuspidem thyrsο gerens.

but Ovid (*Metamorph.* XI. 9) distinctly implies that the thyrsus had no point;

Hastam

Quæ foliis præserta notam sine vulnere fecit.

and the learned Virgil says (*Æneid* vii. 396),

Pampineasque gerunt, incinctæ pellibus, hastas,

which he calls (v. 390) *molles thyrsos*; Lucian, too (*Bacchus*, c. I. p. 292, Lehm.), describes the Bacchanalians as *κιττῷ ἐστεμμέναι, νεβρίδας ἐνημμέναι, δόρατά τινα μικρὰ ἔχουσai, ἀσίδηρα, κιττοποιητὰ καὶ ταῦτα*, where, although he calls the thyrsus a spear, he does not give it a point; and Diodorus (III. c. 64) distinctly says that they sometimes had spears covered with ivy “instead of *thyrsi*”; *ἀναδιδόναi γὰρ ταῖς βάκχαις ἀντὶ τῶν θύρσων λόγχας τῷ κιττῷ κεκαλυμμένας τὴν ἀκμὴν τοῦ σιδήρου*. So that it appears probable that this notion of the thyrsus was a misconception resulting from a legend, that the covered spear was sometimes substituted for the peaceful emblem of the Bacchanalians. The *νάρθηξ* itself would be much too slight for a spear-shaft.

(2) *Καλοκάγαθός*. The general meaning of *καλὸς καγαθὸς* has long been well-known, and Englishmen are in the habit of congratulating themselves that their word, “gentleman,” is the only modern term which precisely expresses the meaning of the Greek compound, an opinion in which foreign writers seem, on the whole, to concur. But it does not appear to have been satisfactorily shown how a combination of these two simple adjectives came to denote such a complex idea, nor have the moderns sufficiently distinguished between the political and moral use of the word. For instance, one of the greatest and most learned of our theologians supposes that the use of *καλοκάγαθία*, to signify moral perfection, is derived from the literal subsequent meaning of its two component parts. “That which is good in the actions of men,” says Hooker (*Ecclesiast. Polity*, I. § 8. p. 281, Keble), “doth not only delight as profitable, but as amiable also. In which consideration the Grecians most divinely have given to the active perfection of men, a name expressing both beauty and goodness; because goodness, in ordinary speech, is, for the most part, applied only to that which is beneficial.” Writers of our own time have given still more vague and general

interpretations¹. We think, therefore, that it will not be unadvisable to examine, with more minuteness than has generally been done, what is the primary meaning of each of the adjectives *καλὸς* and *ἀγαθός*, what is the significance of this compound as a political term, and what its application as a moral epithet.

With regard to the second adjective, *ἀγαθός*, little remains to be done: Welcker, in his admirable introduction to *Theognis* (p. xxi. foll.), has collected nearly all the passages bearing on the subject, and has clearly shown that the Greek *ἀγαθοί*, as also *ἄριστοι*, *ἀριστῆες*, &c., the Latin *boni*, *optimi*, *optimates*, and the old German *Rachinburgi*, *gute Männer*, *Gudemänner*, *guden Manne*, and *Herrn von Rechte*, are names of the nobles, the men of rank, and of good family, in a state. To which, in Greek, *κακοί*, *δειλοί*, as epithets of the common people, are regularly opposed; an opposition which has taken such deep root, that it is even preserved in compounds; e. g. *κακόπατρις* (*Alcæus fr. 9*), and *κακογείτων* (*Sophocl. Philoct. 688, Herm.*). Of the last word, Welcker writes as follows (*Rhein. Mus.* for 1833. p. 450); “*κακογείτων* is a low-born, common neighbour, a poor native dwelling by a man of the noblest extraction, which is also mentioned v. 180,

οὗτος πρωτογόνων ἴσως
οἴκων οὐδενὸς ὕστερος.

In the verses below, the low-born native finds his opposite, when the chorus says, *νῦν δ' ἀνδρῶν ἀγαθῶν παιδὸς ὑπαντήσας*.” In the same political sense as *οἱ ἀγαθοί*, the Greeks used *οἱ ἐσθλοί*, *οἱ βελτίους*, *τὸ βέλτιστον*, *οἱ βέλτιστοι*, as opposed to the *δῆμος* (*Xenophon passim*). An older word of the same import was *ἀχαῖα* (*Λάκωνες*, *ἀγαθά*. *Hesych.*), *χαός*, *χαιός*, *χαῖος*, whence the name of the Achæans (= *ἀγαθοί*, *ἀριστῆες*. *Müller Prolegom. zur Mythol.* p. 291. *Comp. Journ. of Educat.* III. p. 87. *Philol. Mus.* II. p. 88), and Chaonians (*Welcker ad Theogn.* p. xxviii. note) were derived, just as the name of the Goths was derived from *gôths*, *gôda*, “good,” (*Savigny Gesch. Röm. Rechts.* I. p. 194).

The derivation of *ἀγαθός* is a great stumbling-block to etymologists. Bopp would connect it with the Sanscrit *agâdha-s*

1. Thus Passow says (*Meletemata Critica in Æschylî Persas* p. 31. ed. Bach.), “*Interior civilis bellicæque prudentiæ concentus, qui sub nomine καλοκάγαθίας uno*

vocabulo complectebatur.” Delbrück’s definition is still looser (See *Philol. Mus.* I. p. 503).

“deep” (*Vergl. Gramm.* p. 411); this we conceive to be undoubtedly erroneous. Pott’s suggestions¹ (*Etymol. Forsch.* II. p. 299) do not merit the slightest attention, nor can we say much in favor of Passow’s derivation from ἄγαν. We consider the first letter to be one of those moveable initials, of which we have already spoken more than once, and class all the following words together; ἄ-γα-θός, ἡ-γά-θεος, γη-θέω, ἄ-γανός, ἄ-γα-μαι, ἄ-γάν-μαι, ἄ-γαίο-μαι, ἄ-γαν-ρός, γάν-ρος, γαν-ριάω, Latin *gaudeo*, γά-νος, γά-νυμι, γαίειν, γαθιάδας (ἡρώος ὄνομα ὃς καὶ τοὺς καταφεύγοντας εἰς αὐτὸν ῥύεται ἐκ θανάτου, Hesychius), γαδεῖν, γάδεσθαι, γαδεώ (χαρά, Hesych.). The meaning which runs through most of these words, is that of “pleasure”, “joy”, “delight”: ἄ-γα-μαι, into which the idea of “wonder”, &c., frequently enters, derives this meaning from a primary one of pleasure, for the wonder implied is always considered as a pleasurable sensation, and the word really signifies in an infinity of passages, as well in the most ancient as in the more recent authors, “to be pleased with,” “to delight in,” “to think highly of.” We have before shown how the synonymous root χα-ρ- derives all its meanings from the primary one of containing, thence support, firmness, &c. We find this root with a set of formations corresponding in the main to those of the root γα-. The primary meaning of the root χα- or χαF is containing (χά-ω, χαῦ-νος, &c.), thence of firmness, hardness, *the earth* (χέ-ρ-σος, χό-ρος, χώ-ρα, &c.), thence of help or assistance in battle, and pleasure in such assistance (χά-ρις, &c.), then it becomes the epithet of a person who can so help us (χρήσιμος), and finally of an order in the state, composed of the best warriors or chief men (χρηστοί, &c.). To this last meaning belongs the old word χαός (or χαιός, Lobeck *Phryn.* p. 404), where the termination -ρος is omitted. Similarly from γα-, we have the primary idea of firmness or support, *the earth* (γαῖα, γῆ); assistance in battle (as in the patronymic γα-θιάδας), joy, pleasure in general (in most of the words quoted above); and thence the epithet of a warrior, a person able to help in battle, and the upper class in society, which was composed of such warriors (ἀγαθοί, &c.). We do not presume to say that the roots γα-, and χα- are connected, though this is not impossible; it is, however, important

1. Surely he is joking when he proposes to consider it as a compound of ἄγαν and καθαρός!

to observe this correspondence in their applications. The class of nobles being continued by hereditary descent, ἀγαθός came to express not only the bravery, which was one of their qualifications, but also their good descent, which was another, so that ἀγαθός became a synonym for εὐγενής, and thus Hesychius (s. v. ἀγαθόν) rightly defines the epithet as signifying both ἀνδρείος and γενναῖος; conversely, γενναῖος is used as a synonym for ἀγαθός, in the meanings “brave”, “strong”, “great” (in Sophocl. *Aj.* 938, γενναία δύη is explained ἰσχυρά by the Scholiast), just like *gnavus*, *ingens*, from *gigno* in Latin. Another obvious quality of the nobles was their wealth, and thus we find as synonyms for the ἀγαθοί, such adjectives as οἱ πλούσιοι, οἱ εὐποροί, οἱ τὰ χρήματα ἔχοντες, οἱ πάχες, and (because it was considered a great mark of wealth to keep a horse, Aristot. *Polit.* IV. 3), ἵππεῖς, ἵπποβοτάι, ἵπποδάμοι, &c. In Thucydides, they are called δυνατοί (I. 24), οὐχ οἱ ἀδυνατώτατοι (I. 5), and wealth is called δύναμις (I. 2). In opposition to these terms, the lower orders are called πένητες, and thus, in the words of Aristodemus, as reported by Alcæus,—“it was money that made the man, there was no goodness nor honour in the poor” (χρήματ’ ἀνὴρ, πενιχρὸς δ’ οὐδεὶς πέλετ’ ἐσλὸς οὔτε τίμιος. *Ap. Schol. Pind. Isthm.* II. 17). But, in the matter of wealth, that a man might be really a gentleman, he must have inherited his riches, so that the other qualities of the nobles are presumed in their epithets implying opulence. For instance, in Æschylus (*Agamemn.* 1010) we read ἀρχαιοπλούτων δεσποτῶν πολλὴ χάρις, which is thus explained by Aristotle (*Rhet.* II. 32), διαφέρει δὲ τοῖς νεωστὶ κεκτημένοις καὶ τοῖς πάλαι τὰ ἥθη, τῷ ἅπαντα μᾶλλον καὶ φανλότερα τὰ κακὰ ἔχειν τοὺς νεοπλούτους, ὥσπερ γὰρ ἀπαιδευσία πλούτου ἔστι τὸ νεόπλουτον εἶναι. From the tithes, &c., which they received, the nobles were called δωροφόροι, from the lands which they occupied γεώμοροι, from their conspicuous position γνώριμοι, or “notables.”

The adjective καλός, which has the penultima long in Homer and the old epic poets, stands for καδ-λός, and is connected with κέ-κασ-μαι, κέ-καδ-μαι, κε-καδ-μένος, κάδ-μος. Döderlein, to whom this etymology is due, justly remarks (*Lat. Syn. und Etym.* III. p. 38) that it may be compared to ἐάνός for ἐαδνός, and the more so as δλ does not belong to the Greek *ecphoneses*: and in another place (III. p. 97.) he shows that κα-λός and και-νός (καί-νυ-μαι is the ordinary form of the present for κέκασμαι)

are connected, as *canus*, *candidus* with *re-cens*, and as *δεινός* with *δειλός* from *δεῖδω*. It is possible that *καλός* may have been written originally with a doubled λ like *κάλλος*: compare *bellus* for *benulus*. The primary meaning of the word is in strict accordance with this derivation; it signifies, “furnished with outward adornments,” in general, “that of which the outward form is pleasing,” and thus it is regularly opposed to *αἰσχρός*, especially in Plato (*Hipp. Maj.* 289 A. *Protagor.* 332 C. *Sympos.* 183 D. &c., &c.), and *αἰσχρός καὶ κακός* is opposed to *καλός καὶ ἀγαθός* (Plato *Sympos.* 201 E). But to the Greek notion of *κάλλος* something beyond mere outward garnishing of the person was required; it was not a languishing beauty, a listless though correct set of features, an enervated voluptuousness of figure, to which the homage of their admiration was paid. It was the grace and activity of motion which the practice of gymnastic exercises was calculated to promote, the free step, the erect mien, the healthy glow, combined with the elegancies of conversation and the possession of musical accomplishments; it was in fact the results of an union of the *μουσική* and *γυμναστική*, of which their education was made up. It was this that constituted beauty in the Greek sense of the word—the educated man alone was considered *καλός*; thus Æschines says (*in Ctesiph. ad fin.*) *παιδεία, ἥ διαγινώσκομεν τὰ καλὰ καὶ τὰ αἰσχροῦ*, and in the Attic writers in general this adjective is used as an epithet of persons distinguished for their accomplishments (see the passages quoted by Heindorf *ad Plat. Hipp. Maj.* § 1). Now the people of rank and wealth were always then, as they are now, most able to obtain the advantages of education, they had more leisure than the common people to devote themselves to those exercises which were calculated to produce grace and ease of motion and the other accomplishments necessary to the gentleman; and as the aristocracy, like the knights of the middle-ages and the *duinhe-wassals* in a Highland Clan, owed much of their reputation for superior valour to their being better furnished with arms, and, from leisure and practice, more skilled in the use of them, so they owed their superior accomplishments in music, dancing, &c., to the same cause; the best dancer and the best fighter were synonymous, the first in the chorus and the foremost in the battle array were the same persons, they were the nobles, the

pre-eminently καλοὶ καὶ ἀγαθοί. It was from this that they are called χαριέντες, and the same idea is clearly seen in the use of κόσμος as an old political term.

If there were any doubt with regard to what we have just stated, it would be removed by the following passages. In fact the καλοὶ καὶ ἀγαθοί are actually described according to this definition in Euripides (*Ion*. 598);

ὅσοι δὲ χρηστοί, δυνάμενοι τ' εἶναι σοφοί,

where χρηστοί is, as we have seen, another name for the ἀγαθοί, and δυνάμενοι εἶναι σοφοί expresses that facility of acquiring knowledge and accomplishments by the attainment of which the nobles became καλοί. Again, in the same author (*Alcestis* 605),

τὸ γὰρ εὐγενὲς ἐκφέρεται πρὸς αἰδῶ,
ἐν τοῖς ἀγαθοῖσι δὲ
πάντ' ἐνεστὶν σοφίας.

Here the αἰδῶς is that sense of honour which is the natural accompaniment of gentle blood and to which the nobles owed their innate valour; thus Ajax says (*Iliad* xv. 561),

ὦ φίλοι ἄνδρες ἐστὲ καὶ αἰδῶ θέσθ' ἐνὶ θυμῷ,
ἀλλήλους δ' αἰδεῖσθε κατὰ κρατερὰς ὑσμίνας.
αἰδομένων ἀνδρῶν πλεόνες σοοὶ ἢ πέφανται,
φευγόντων δ' οὔτ' ἄρ κλέος ὄρνυται οὔτε τις ἀλκή,

and Archidamus, in Thucydides (I. 84), distinctly attributes the bravery of the Spartan aristocracy to the possession of this quality: "our good κόσμος," says he, "makes us πολεμικοί, ὅτι αἰδῶς σωφροσύνης πλείστον μετέχει, αἰσχύνης δὲ εὐψυχία, where αἰσχύνη is used as a synonym for αἰδῶς as in *Æsch. Sept. c. Theb.* 394,

μάλ' εὐγενῇ τε καὶ τὸν αἰσχύνης θρόνον
τιμῶντα, καὶ στυγοῦνθ' ὑπέρφρονας λόγους—
αἰσchrῶν γὰρ ἀργός, μὴ κακός δ' εἶναι φιλεῖ.

We take this opportunity of explaining a passage in Pindar (*Olymp.* VII. 441), where Böckh and Dissen, misled by the Scholiast, have mistaken the sense of αἰδῶς. Pindar is saying that valour (ἀρετή) and usefulness in battle (χάρματα) are produced by that sense of honour (αἰδῶς), which springs from provident

foresight, from a careful looking to the consequences of inattention to the rules which regulate the conduct of honourable men (*προμηθεύς*): he expresses the sentiment thus,

ἐν δ' ἀρετὰν
ἔβαλεν καὶ χάσματ' ἀνθρώποισι Προμαθείος Αἰδώς.

We have written the two last words with capitals, because the qualities are personified. *Προμηθεύς* here is not the Titan, but the more general word equivalent to *πρόνοια* or *φρόνησις* (see Welcker *Trilog.* p. 70 note) and *Αἰδώς* is called the daughter of *Προμηθεύς* by an allegorical genealogy similar to that in *Æsch. Sept. c. Theb.* 208 (above p. 383),

Πειθαρχία γάρ ἐστι τῆς Εὐπραξίας
μήτηρ, γυνὴ Σωτήρος· ὧδ' ἔχει λόγος.

“Obedience produces good fortune, and helps men as much as the preserving Jupiter.” The passage in Pindar is introduced as an old saw like this (ὧδ' ἔχει λόγος), and should perhaps be printed between inverted commas like many other aphorisms in that author. The stress is to be laid upon the *Προμαθείς*, the fact spoken of being only the want of care on the part of the Rhodians, in not offering burnt sacrifices to Zeus and Athena.

As the wealth of the nobles enabled them to provide themselves with a more expensive panoply, to appear, in fact, as heavy-armed men with the *δόρυ καὶ ξίφος καὶ τὸ καλὸν λαισήμεον πρόβλημα χρωτός* (*Hybrias ap. Athen.* p. 695 F), arms which the poorer classes were unable to buy, and which they were not generally even permitted to possess (see *Thucydides* III. 27), and as their leisure allowed them to acquire skill in using their arms, and to spend most of their time in the open air, which was essential, in their opinion, to the full development of the bodily powers, all these attributes would become mixed up with the definition of a man of rank, and by taking a part for the whole, might be considered as constituting his definition. On the contrary, the poorer people were taunted with epithets derived from their sedentary employments, which took away from the grace of the person, thus *Aristot. Polit.* VIII. 1, διὸ τὰς τε τοιαύτας τέχνας ὅσαι τὸ σῶμα παρασκευάζουσι χεῖρον διακεῖσθαι βαναύσους καλοῦμεν,—and with their inferior armour; thus *Sophocles* makes Menelaus say to Teucer (*Aj.* 1096), ὁ τοξότης ἔοικεν οὐ σμικρὸν φρονεῖν, to which he

answers, οὐ γὰρ βάναυσον τὴν τέχνην ἐκτησάμην, for although the light-armed troops were necessarily composed of the lower order of people, yet all these were not βάναυσοι; at least Aristotle says (*Polit.* IV. 3), καὶ τῶν εὐπόρων δὲ καὶ τῶν ἀπόρων τὸ μὲν ὀπλιτικὸν τὸ δὲ ἄνοπλον, καὶ τὸν μὲν γεωργικὸν δῆμον ὀρώμεν ὄντα, τὸν δ' ἀγοραῖον, τὸν δὲ βάναυσον.

As a political term, then, καλὸς κάγαθος implied no particular moral excellence: it is merely the name of the upper class, "the accomplished and well-born," as opposed to the δῆμος (*Thucyd.* VIII. 48. IV. 40). Sometimes, indeed, it would seem to imply nothing more than good descent, as when Herodotus uses it as a synonym for *Piromis* (II. 143).

The application of this compound to denote moral excellence is thus explained by Aristotle (*Polit.* IV. 8), εἰώθασι δὲ καλεῖν τὰς πρὸς τὴν ὀλιγαρχίαν μᾶλλον (ἀποκλινούσας) ἀριστοκρατίας διὰ τὸ μᾶλλον ἀκολουθεῖν παιδείαν καὶ εὐγένειαν τοῖς εὐπορωτέροις. ἔτι δὲ δοκοῦσιν ἔχειν οἱ εὐποροὶ ὧν ἕνεκεν οἱ ἀδικοῦντες ἀδικοῦσιν ὅθεν καὶ καλοὺς κάγαθοὺς καὶ γνωρίμους τούτους προσαγορεύουσιν. The philosopher, however, has reversed the natural order, for the rich were not called καλοὶ κάγαθοι on account of their respectability, but conversely the name of the upper classes, from their general respectability, came to be used as a synonym for "respectable". A more apt instance would have been the use of ἐπιεικής, as a synonym for καλὸς κάγαθος. It was because the better classes, having no temptations like their poorer brethren, abstained from those vices which common opinion reprobated, that their regular name became an epithet descriptive of good moral conduct: thus Aristophanes says (*Ran.* 7, 8), τῶν πολιτῶν τοὺς καλοὺς τε κάγαθοὺς—οὓς μὲν ἴσμεν εὐγενεῖς καὶ σῶφρονας ἄνδρας ὄντας καὶ δικαίους, and Æschines opposes it to φαῦλος (*in Ctesiph.* p. 65, 1); οὐδ' ὅστις ἐστὶν οἶκοι φαῦλος, οὐδέ ποτ' ἦν ἐν Μακεδονίᾳ, κατὰ τὴν πρεσβείαν, καλὸς κάγαθος. The older Greeks did not believe that good descent really proved the possession of moral excellence, though they believed in the transmission of luck, and so forth; they looked only to the advantages which the better classes possessed, and would have had little sympathy for the Christian chivalry which adorns the enthusiastic pages of Mr Digby (*Godefridus*, p. 225 foll.); and though Theognis and the advocates of the aristocracy strove to

instill into their readers or hearers that goodness was innate in the nobility, their doctrines were rejected by the democratical spirit of the great literary nation of Greece, and overthrown by the philosophy of Socrates, so that after all they only succeeded in inserting in the philosophical vocabulary one of the old titles of rank, of which the original political meaning was, as we see from Aristotle, soon merged in the new moral use.

Much the same has been the fate of the Latin *gentilis*. This word originally signified "one who belonged to a patrician *gens* or clan", in fact, a patrician, and from this it has gone through the Italian *gentiluomo*, the French *gentilhomme*, to our "gentleman", a word which combines the old political meaning of rank with an expression of those moral and social qualities which we consider, though generally found along with rank, to be attainable by every one. The adjective has diverged in our language into two, one, "gentle", expressing the moral meaning; the other, "genteel", the idea of rank.

The word ἥρως, in its old Homeric use, did not imply any deification or super-human qualities; it was merely a title expressing military pre-eminence applied to all the heavy-armed fighters mentioned in the old poems; it meant, in fact, nothing more than a good soldier; it was originally a title of rank, and had become indiscriminately assigned to all distinguished soldiers, just as the word *knight* was extended in the middle ages to all fighters, and translated *miles* by the monks. We shall not quote from Homer to prove this; all the passages have been collected and the general fact established by a writer in a work which we hope is accessible to most of our readers (*Philolog. Mus.* II. p. 72 foll.). That ἥρως was originally a title of rank we think appears from the following considerations. The termination points to a derivation from ἥρα (ἥρως from ἥραφος, ἥρεús, as πάτωρ from πατράφος, Latin *patruus*, Sanscrit *pitr̥ivyas*) or perhaps from ἥρά-ιος, like ἀγήρως from ἀγήραος, γηραιός, the terminations -ιος (*yas*) and -ς (*vis*) being, as we have seen, equivalent in signification, and thus Ἡρακλῆς, whose connexion with the goddess Ἥρα does not appear to be a sufficient cause for his name, may have been so called as the representative of the race of Heroes (see Pott, *Etymol. Forsch.* II. p. 224). Hesychius says Ἡραῖος was another name for Ἡρακλῆς. However, it is obvious, as we have just shown, that ἥρως

and ἥρα are themselves connected; how they are related will appear from an investigation of the latter name. The goddess Hera is always spoken of as presiding over or connected with marriage rites; the chief feature in her mythology is her sacred marriage (ἱερὸς γάμος) with Zeus (Diodor. Sic. V. c. 72); her three names, παρθενία (Pindar, *Olymp.* VI. 88), τέλεια (*Nem.* X. 18), χήρα (Pausan. VIII. 22, 2), show that she represented marriage and its two periods of negation, according to the principle of contrast which we have pointed out on a former occasion (*Theatre of the Greeks*, 4th Edition, p. 15). The name τέλεια, as applied to Juno, refers to the γάμοιο τέλος spoken of by Homer (*Odys.* xx. 74),

εὖτ' Ἀφροδίτῃ διὰ προσέστιχε μακρὸν Ὀλυμπον
κούρης αἰτήσουσα τέλος θαλεροῖο γάμοιο,

which is called γαμήλιον τέλος by Æschylus (*Eumenid.* 838), and refers to the marriage rites as an initiation into a new life (Ruhnken, *Timæus*, p. 224). Ἡβη appears as the wife of Ἡράκλῃς, and the daughter of Ἥρα (Pind. *Nem.* X. *ubi supra*). The common epithet expressing lawful marriage in Homer is κουρίδιος, as κουριδίη ἄλοχος, κουριδίη γυνή, κουρίδιος φίλος, &c. (Buttmann, *Lexilog.* I. 32), and κύριος was the Athenian name for the husband in reference to the wife, as δεσπότης was of the master in reference to his female slave. Thus Aristophanes (*Eqq.* 969),

χρυσοῦ διώξει Σμικύθην καὶ κύριον,

alluding to the custom of including the husband in actions against the wife, as the Scholiast observes, τὸν Σμικύθην κωμῶδει ὡς κίναιδον, κύριον δὲ λέγει τὸν ἄνδρα. οὕτω γὰρ ἐπεγράφοντο ἐν τοῖς δικαστηρίοις, Ἀσπασία καὶ κύριος, τουτέστιν ὁ Περικλῆς. Also κόρος, κούρης, κύρβας, κυρσάνιον, κύρνος, were names of children born in lawful marriage, especially those of the upper classes. Thus in Critias (*apud Athenæum* p. 432 F),

οἱ Λακεδαιμονίων δὲ κόροι πίνουσι τοσοῦτον
ὥστε φρέν' εἰς ἱλαρὰν ἀσπίδα πάντ' ἀπάγειν.

and in Plutarch (*Lycurg.* XIV. 47), οὐδὲν ἥττον εἴθισε τῶν κόρων τὰς κόρας γυμνάς τε πομπεύειν καὶ πρὸς ἱεροῖς τισιν ὀρχεῖσθαι καὶ ᾄδειν (Welcker in *Theogn.* p. xxxiii). But κύριος and the cognate κοίρανος were also used as titles of honour, as

signifying a lord and master. There is, therefore, on this side at least, a connexion between the words referring to marriage and those expressing rank and dignity. Such is also the case in the German *Ehe* "marriage," and *Ehre* "honour."

Buttmann rightly observes (*Lexil.* I. p. 35 note), that on the analogy of κοῖλος Germ. *hohl*, κάλαμος, Germ. *Halm*, κύων Germ. *Hund*, &c., we might fairly place κουρίδιος by the side of the German *Heurath*, more anciently written *Heurde*, and compare κύριος with *Herr*. Now the Latin *herus* is a perfect synonym to κύριος, and its analogy to *Herr* cannot be denied. Moreover Ἐρρος was another name for Ζεύς (*Hesych. s. v.*), and as the old Greek gods went in pairs, and Zeus and Hera were conjointly worshipped as presiding over the marriage rights (*Diodorus ubi supra*), we may well suppose that this is but another way of writing the masculine of Ἥρα. From these analogies alone it is probable that ἥρως and κύριος may have a cognate origin.

The Sanscrit *vîrās* (Latin *vir*) signifies "a warrior, a champion, a hero," as a feminine, *vîrâ*, it denotes "a matron, a wife, and mother," and as an adjective expresses the qualities "excellent, eminent, heroic, powerful," &c. From this is formed the abstract *vaira* "heroism." In the same language we have as a synonym to *vîras*, the word *çûras*, of which the first letter as we have often seen corresponds to a Greek κ; so that this word may fairly be compared with κύριος. Pott thinks (*Etymol. Forsch.* I. p. 131) that it is identical also with ἥρως on the analogy of ἔκυρος, Sanscrit *çvaçra*, Latin *socerus*. In another place, (I. p. 221) he makes *çûras* a compound *su* = εὖ and *vîras*, which, however, we think quite unnecessary: we believe that *vîras*, *çûras* are but modifications of the same word, and both connected with the Sanscrit root *vr̥* or *vār* "to protect," modern German *Wehr*, *wehren* (above p. 366). Further modifications are *varas* subst. a "husband, or bridegroom," adj. "excellent," compar. *varîyas*, superl. *varisht'h'a*, and *urus* "great"; with the latter of which we may compare εὐρύς, οὐρα-νός, with the former Ἄρης (= Φάρης), Φαρείων, Φάριστος, Φαρετή, Φαρσην, Φάρ-ρην, Latin *Mâ-vor-t-s*, "man-protector" like Λα-Φέρτης, conversely, the Oscan *Mâ-mers* "man-killer." With these may also be compared the Erse *fear*, "a man," Welsh *gŵr*, *wr*, "a man," *gwraig*, *wraig*, "a woman," Latin *virgo*, *virago*,

Erse *frag*, German *Frau*: *fear* comes very near *ἦρως* (Prichard, *Eastern Origin of the Celt. Nations* p. 66).

A similar connexion of the ideas “warrior,” “husband,” “man of rank,” we find in the Sanscrit *naras*, *nr̥is* “a man,” “a lord,” “a husband”, from *nri* “to guide;” Celtic *nér* “a lord,” Greek *ἀ-νήρ* (= *ἀ-νέρ-ς*). This word finds its fullest developement in the old Latin or Sabine language. *Nero* as a cognomen of the Sabine family of the Claudii is familiar to every one; it signifies “a brave man,” and its derivatives *neria*, *nerio*, *neriene*, *nerienes* signify “valour,” also the wife of Mars, as in the following passages quoted by Aulus Gellius (XIII. 22). Plautus (*Truculent.* II. 6. 34):

Mars peregre adveniēns salutāt Nerienem uxorem suam.

Cn. Gellius (*Annal.* III): *Neria Martis te obsecro pacem dare, uti liceat nuptiis propriis et prosperis uti, quod de tui conjugis consilio contigit.* Licinius Imbrex (*in Neæra Com.*):

Nolo ego Neæram te vocent, sed Nerienem:

Quum quidem Marti es in connubium data.

Ennius (*Annal.* I): *Nerienem Mavortis et Herclem.*

It is well known that *ἀ-νήρ*, as distinguished from *ἄνθρωπος*, invariably means “a brave man” or “a husband,” and to the latest period *ἄνδρες* was a complimentary address (see Valckenaer *ad Herod.* VII. 210).

Again we find the same combination in *πόσις*, *πότνια*, *πότνα*, *δεσ-πότης* *δέσ-ποινα*, Latin *potes* (as *Dii potes*), *potens*, *pot-sum* (*possum*), &c. Sanscrit *patis*, *patnī*, &c.

The title *ἄναξ* does not seem to imply any thing beyond mere superiority though it has a domestic as well as a political application: thus we have in Homer *οἶκοιο ἄναξ* of the *pater familias* (*Odyss.* I. 397). It is probably, like *ἄν-θος*, connected with the preposition *ἀνά*. The simpler form is *ἄνα-κος* or *ἄνα-κ-ς* preserved in Hesychius as an epithet of the Dioscuri—*ἄνακας*. *τοὺς Διοσκόρους*.—*ἀνάκειον*. *τὸ Διοσκούριον*—*ἀνάκοιν*. *τοῖν Διοσκόροι*—and perhaps *Δεύας*. *τοὺς ἀνάκους* (instead of *ἀκάκους*) *θεούς*. *Μάγοι*. The common form *ἄνακτ-ς*, gen. *ἄνακτος*, has the double pronominal ending: *ἀνάκτωρ* is a still longer form. If it is simply a formation from the preposition *ἀνά*, it may be compared with *ὑβρις* (*ὑπέρ*), “uppishness,” *ὑπέρ-*

φεν, ὑπερφυῶς, ὑπερφίαλος (= ὑπερφύαλος Buttman *Lexil.* II. p. 213), ὑπέροπλος, &c. In immediate connexion with ὕβρις we constantly find κόρος. Sometimes κόρος is the parent of ὕβρις as in Theognis v. 153 (p. 7, Welcker):

τίκτει τοι κόρος ὕβριν ὅταν κακῶ ὄλβος ἔπῃται
ἀνθρώπῳ καὶ ὅτῳ μὴ νόος ἄρτιος ᾖ.

v. 751 (p. 12 Welcker) ὕβριζι πλούτῳ κεκορημένος. Diog. Laert. (I. 59), quoting Solon, says τὸν μὲν κόρον τοῦ πλούτου γεννᾶσθαι, τὴν δ' ὕβριν ὑπὸ κόρου. Proclus (*in Cratyl.* p. 59 Boissonade) ὕβριν γὰρ φασιν (οἱ ποιηταὶ) τίκτει κόρος (quoted by Welcker p. 93). Pythagoras (*apud Stobæum Serm.* XLI. p. 247): πρῶτον τρυφήν, ἔπειτα κόρον, εἶτα ὕβριν, μετὰ δὲ ταῦτα ὄλεθρον. Conversely, ὕβρις is the mother of κόρος. Pindar (*Olymp.* XIII. 10.):

ἐθέλοντι δ' ἀλέξειν
Ὑβριν, Κόρου ματέρα θρασύμυθον.

(with which may be compared Solon p. 88, Bach.

δήμου θ' ἡγεμόνων ἄδικος νόος, οἷσιν ἐτοῖμον
ὕβριος ἐκ μεγάλης ἄλγεα πολλὰ παθεῖν,
οὐ γὰρ ἐπίστανται κατέχειν κόρον.)

Bacis (*apud Herodot.* VIII. 77):

δῖα Δίκη σβέσσει κρατερόν Κόρον, Ὑβριος υἱόν,
δεινὸν μαιμώνοντα, δοκεῦντ' ἀνὰ πάντα τίθεσθαι.

And in accordance with this genealogy we would emend a passage of Æschylus (*Agamemn.* 741 foll), which the editors have regarded as hopelessly corrupt. It stands thus in the MSS.

φιλεῖ δὲ τίκτειν ὕβρις
μὲν παλαιὰ νεά-
ζουσιν ἐν κακοῖς βροτῶν ὕβριν
τότ' ἢ τόθ' ὅταν τὸ κύριον μόλη,
νεαρὰ φάους κότον
δαίμονά τε τὸν ἄμαχον, ἀπόλεμον, ἀνίερν
θράσος μελαίνας μελάθροισιν ἄτας
εἰδομέναν τοκεῦσιν.

We read ;

φιλεῖ δὲ τίκτειν Ὕβρις
 μὲν παλαιὰ νεά-
 ζουσιν ἐν κακοῖς βροτῶν Ὕβριν,
 τοτ' ἢ τόθ', ὅταν τὸ κύριον μολῇ
 νέα δὲ φύει Κόρον,
 δαίμονά τε τὸν ἄμαχον, ἀπόλεμον, ἀνίερον
 Θράσος, μελαίνα μελάθροισιν Ἄτα,
 εἰδομένα τοκεῦσιν.

that is “ old Ὕβρις is wont to bring forth new Ὕβρις, this new Ὕβρις brings forth Κόρος and Θράσος, two black fates to houses, like their parents.” For the duals at the end compare Soph. *Antig.* 529.

τρέφω δὲ Ἄτα κάπαναστάσεις θρόνων.

Now this κόρος which we see in such close connexion with ὕβρις is in our opinion a word of cognate meaning. It is, we conceive, connected with κόρ-υ(θ)ς, κορ-υφή, &c. “the head or top of any thing.” The idea of “satiety”, which κόρος often conveys, is subordinate to that of “fullness”, “up to the top”, as appears from the well known passage of Sophocles (*Æd. Tyr.* 874) :

ὕβρις, εἰ πολλῶν ὑπερπλησθῇ μάταν
 ἂ μὴ ἴπικαιρα, μηδὲ συμφέροντα,
 ἀκροτάταν εἰσαναβᾶσ' ἀπότομον
 ὥρουσεν εἰς ἀνάγκαν
 ἐνθ' οὐ ποδὶ χρησίμῳ
 χρῆται.

We observe that χλιδῇ in v. 888 is a synonym of κόρος. Thus κόρος comes to have the sense of having got as far as one can go, consequently the idea of fixedness, to which ὕβρις never arrives till it has produced κόρος. This view of the case is confirmed by the following passage of Plato (*Philebus* p. 26) : ὕβριν γάρ που καὶ ζύμπασαν πάντων πονηρίαν αὕτη κατιδοῦσα ἢ θεός, πέρας οὐδὲν οὔθ' ἡδονῶν οὔτε πλεονασμῶν ἐνὸν ἐν αὐτοῖς, νόμον καὶ τάξιν, πέρας ἔχοντ', ἔθετο. It is from the sense of fixedness and limitation implied in κόρος that we derive the meaning “uncertain”, “unsteady”, “wayward”, “always changing its

place", with which ἀκόρεστος is found in the dramatists. Thus Æschylus (*Agamemn.* 1304),

τὸ μὲν εὖ πράσσειν ἀκόρεστον ἔφν
πᾶσι βροτοῖσι.

1461. φεῦ φεῦ κακὸν αἶνον ἀτηρ-
ᾶς τύχας ἀκορέστου.

972. μάλα γάρ τοι τὰς πολλὰς ὑγείας ἀκόρεστον τέρμα,
in imitation of Solon (p. 80 Bach),

πλούτου δ' οὐδὲν τέρμα πεφασμένον ἀνδράσι κεῖται,
οἱ γὰρ νῦν ἡμῶν πλείστον ἔχουσι βίον
διπλάσιον σπεύδουσι· τίς ἂν κορέσειεν ἅπαντας;

(where we may remark by the way that in Solon's laws πεφασ-
μένως stands for φανερώς, see Lysias in *Theomnest.* p. 117 (363)),
Sophocles *Æd. Col.* 120,

ποῦ κυρεῖ ἐκτόπιος συθεῖς ὁ πάντων
ὁ πάντων ἀκορεστότατος;

In this last passage it is applied to Œdipus whom the chorus cannot find; and they charge him with leaving the place where he was before from mere caprice—"where is the most unsatisfied, most place-changing of men."

The outward resemblance of this κόρος to the similarly written member of the family, which we have discussed above (κύρ-ιος, κοίρ-ανος, &c.), is obvious. Let us examine if there be not also a connexion in meaning. That the idea of "a head" or "completion" is nearly connected with that of "king", "lord", or "master", cannot be denied; therefore in this sense of κόρ-ος it may fairly be assigned to the same family. But what is the connexion between this word and κόρος "a young man"? This again can be easily shown. The idea of "fullness", "growing up", enters into our notion of a fullgrown youth, and this the Greek expresses very strongly. Thus ἀδ-ρὸς (connected with ἀδινός; Buttman *Lexil.* I. p. 206) is used as an epithet alike of a young man, of a tree, of fire, of snow (Herod. IV. 31), of any thing in fact in which the idea of fullness, growth, strength is implied; ἀδροτήs is constantly found in connexion with ἥβη

or μένος in Homer, and ἀδροσύνη is used of the top-heaviness of ripe corn in Hesiod (ἔργα καὶ ἡμέραι v. 471):

ὦδέ κεν ἀδροσύνη στάχυνες νεύοιεν ἔραζε.

Again, ἄνθος—connected with ἀνά, ἄνω, ἀνήνοθε (Pott *Etymol. Forsch.* I. p. 211), and, if the derivation proposed above be the true one, with ἄναξ—is also used in connexion with ἥβη. Thus Pindar (*Pyth.* IV. 158, 281), σὸν δ' ἄνθος ἥβας ἄρτι κυμαίνει. The last word carries the metaphor only a little farther: a swelling like a wave, an excessive fullness even to overflowing, being also attributed to the lusty vigour of youth. Accordingly we have in the same ode of Pindar (179=318) κεχλάδοντας ἥβα: κεχλάδοντας is an irregular form of the perfect participle of χλάζω, or rather a new present formed from the perfect according to a custom not very uncommon in Greek: in fact we have a re-duplicated present καχλάζω as a synonym of χλάζω, which means “to swell, to be exuberant or full”; hence the rushing, loud-sounding noise of overflowing water is sometimes implied in the notion of the word. In a dithyramb of Pindar (*Fragm.* 48) we have

σοὶ μὲν κατάρχειν,
μᾶτερ μεγάλα, πάρα ῥόμβοι κυμβάλων,
ἐν δὲ κεχλάδειν κρόταλα,

where κεχλάδειν follows the analogy of κεχλάδοντας. Similarly (*Olymp.* IX. 3) we have καλλίνικος ὁ τριπλόος κεχλαδῶς, “a swelling, full-toned, loud-sounding song of victory,” and in the passage under consideration κεχλάδοντας ἥβα “in all the exuberance of youth,” “swelling with youthful strength.” We do not agree with Buttman (*Ausführl Sprl.* II. p. 255, note) in supposing that there is no connexion between κεχλαδῶς and καχλάζω; the use of καχλάζουσα, of a cup filled with *mousseux* wine, sparkling, bubbling, and running over (Pindar *Olymp.* VII. init. φιάλαν ἔνδον ἀμπέλου καχλάζοισαν δρόσῳ) shows that the words have precisely the same force, for κεχλάδουσιν or κεχλαδυῖαν might have been used here. There is no doubt, however, that it is also connected with χλῆδος, χλιδή (a perfect synonym of κόρος, *Æd. Tyr.* 888. and above, p. 414), and χλιδάω, and thus χλιδῶσα μολπὴ is used, like καλλίνικος ὁ κεχλαδῶς, in Pindar (*Olymp.* XI. 88=100). In precisely the same manner σφριγᾶν and ὀργᾶν are used

as synonyms to ἀκμάζειν (Ruhnken *ad Timæum*, p. 244). It is remarkable that ὀργάν, which thus conveys the sense of fulness implied in κόρος, also, under the forms *regere* (ὀργειν), *rex*, Sanscrit *rajas*, corresponds to the political meaning of κύριος, κοίρανος, &c. The same metaphor, with respect to the exuberance of youth, is found in the Latin language: thus Quintilian (*Instit. Orator.* XI. 3, § 28), *Illud non sine causa est ab omnibus præceptum ut parcatur maxime voci in illo a pueritia in adolescentiam transitu, quia naturaliter impeditur, non, ut arbitror, propter calorem, quod quidam putaverunt; nam est major alias; sed propter humorem potius; nam hoc ætas illa turgescit.*

We see thus how the ideas of fulness, height, completeness, are connected in the Greek language with that of political superiority. We should be perfectly authorized, then, in connecting ἄναξ with ἄνθος and ἀνά, as far as the meaning is concerned, even though the words were not etymologically related to one another. We believe, however, as we stated above, that they spring from a common origin. It is clear, indeed, that ἄναξ was a digammated word (Dawes, *Miscell. Crit.* p. 144. *seqq.*), whereas it does not appear that ἀνά was ever digammated. But this does not create any real difficulty, for the element α, which forms the first part of ἀ-νά, is only the first pronominal stem vocalized through *va=ma* (p. 159, 167), so that *Ἄναξ* is connected with *Ἄνά*, an older and more genuine form of the preposition (p. 356). There are traces of the digamma in the form ἰουθος for ἄνθος. At any rate, we cannot agree with those who connect *Ἄνακτς* with *König*, a word with regard to which we rather adopt the opinion of Thierry. It appears that *König*, more anciently *Koning*, was the name of any person under authority. Thus the converted centurion bears this name,—*ein Koning gieiscot ix in war* (Otfrid, *lib.* 2). Alfred applies the term *Cyning* to Cæsar as general, to Brutus as the head of a party, and to Antony as consul; sometimes he designates the particular office of consul by the compound *Gear-Cyning*, “King for a year.” In the Danish language a chief of pirates was called *Sie-Konong*, the leader of an army *Her-Konong*, and so forth. In the Saxon language we find also *Ober-Cyning*, *Under-Cyning*, *Half-Cyning*. In fact the word is merely the participle of the verb *Können* or *Kennen*, for they were originally identical, and

denotes a person who *kens*, or *can*, who has superior knowledge, or superior power.¹

The original meaning of our English word "Lord" is precisely similar to that which we have endeavoured to point out in several of those Greek names significant of rank. Horne Tooke says (*Diversions of Purley*, II. p. 155. foll.) that it was originally written *Loverd* or *Hlaford*, that it is compounded of the participle *hlaf*, from *hlifian* "to lift," and of the word *Ord*, *ortus*, "source," "origin," "birth," and that it consequently signifies *High-born*, or of an *exalted origin*. That he is right in connecting this word with a verb signifying "to lift up," is sufficiently clear. Similarly, "Lady" is derived from *Hlafdig*, which signifies "lofty," i. e., "raised" or "exalted;" it is written *levedi* in old English MSS. We entertain some doubt, however, as to his supposition, that the termination of "Lord" refers to "birth." We would rather connect it with *Ort* "a place," and thus *Hlaford* will mean "a person in high places," perhaps in reference to the *heóðe* or "dais" in the dining-hall, where the nobles sat (see *Beowulf*, v. 804 Kemble). This last name is also a general designation of height; it means any thing elevated, e. g. a shore, as in our names *Clay-hithe*, *Queen-hithe*, applied to the banks of the Thames where they rise a little.

The German words *Tugend*, *taugen*, signifying "virtue," or "goodness," in general, seem to have had originally a political meaning, like the Greek *καλοκάγαθος*. Thus in *Beowulf* (v. 716 Kemble) we have *cufe he duguðe þeáw*, "he knew the manners of the court;" where *duguðe*, obviously connected with *Tugend*, means "the better part of his followers," "the elders," the *γερονσία*.

(3) *Ἐντελέχεια*. All the questions which have been raised with regard to the celebrated Aristotelian word *ἐντε-*

1. "Cette variété d'application du même mot n'étonnera point quand on saura que ce titre de *Koning* n'est probablement que le particip actif d'un verbe que signifie *savoir* ou *pouvoir*, que par conséquent il ne signifie, lui-même, rien autre chose qu'un homme habile, ou capable, à qui les autres obéissant par la conviction de son habileté reconnue"

(Thierry *Dix ans d'études Historiques*, p. 248. Comp. *Lettres sur l'Histoire de France*, pp. 62—73). "In such Acknowledged Strongest (well-named King, *Könning*, Can-ning, or Man that was Able) what a symbol shone now for them—significant with the destinies of the world" (Carlyle *French Revolution*, I. p. 14).

λέχεια, and all the difficulty which it has caused to philosophers, have been occasioned by an inability to discriminate between this and the compound ἐνδελέχεια, which so nearly resembles it in sound. It will be worth while, then, to explain these words once for all.

The meaning of ἐντελέχεια may be derived without much difficulty from Aristotle himself. The philosopher is in the constant habit of using a double antithesis to the word δύναμις, which he opposes both to ἐντελέχεια and to ἐνέργεια. The δύναμις in this opposition corresponds to ὕλη, the material out of which any thing is immediately made: the ἐντελέχεια to the εἶδος or form which constitutes the definition of the thing. "Substance itself", says Aristotle, "is reckoned a sort of entity, and in this we discriminate, 1st, the material, which by itself does not constitute an individual; 2nd, the shape and form, by which the individuality is determined; 3rd, a compound of the two. Now the material is a δύναμις, but the form an ἐντελέχεια, and that in two ways, either as science (ἐπιστήμη) or as contemplation (τὸ θεωρεῖν)" (*de Animâ* II. 1, § 2): and shortly afterwards (§ 4), he says "the soul is a substance, as the form of a natural body alive δυνάμει; but the substance is an ἐντελέχεια; therefore the soul is the ἐντελέχεια of such a body. But ἐντελέχεια is predicated in two ways, as science and as contemplation; accordingly, it is clear that the soul is an ἐντελέχεια in the same way as science, for sleeping and waking presuppose the soul, and waking is analogous to contemplation, but sleep to the having and not exerting" (i. e. to science, τὸ γὰρ ἡρεμῆσαι καὶ στηῆναι τὴν διάνοιαν ἐπίστασθαι καὶ φρονεῖν λεγόμεθα, *Phys.* VII. 3). "Wherefore the soul is the primary ἐντελέχεια of a natural body δυνάμει alive." The body is a δύναμις, it contains the outward condition necessary to the life of the soul: the soul is the ἐντελέχεια of the body; it is that which makes the body perform its functions; so sight is the ἐντελέχεια of the eye, because it is its perfection and consummation. He calls the soul a primary ἐντελέχεια, because it corresponds to science, the first of the two kinds of ἐντελέχεια. We must not consider the opposition of δύναμις and ἐντελέχεια as equivalent to that of matter and form, it is merely analogous to it, the ἐντελέχεια is not a form, as something distinct from matter and adscititious; it is the acting and

efficient principle which makes the thing what it is, which individualizes it—τὸ γὰρ δυνάμει ὄν καὶ μὴ ἐντελεχείᾳ, ἀόριστόν ἐστιν (*Metaphys.* III. 4).

We adopt in our every day conversation, the Aristotelian distinction between δύναμις and ἐνέργεια. The schoolmen, from whose barbarous Latin we have borrowed many of our common words, used to translate δυνάμει by *potentiâ*, or *virtute*, or *virtualiter*; ἐνέργειᾳ by *actu*, or *actualiter*, which the French have adopted as *virtuellement*, *actuellement*, and we oppose that which exists “virtually” or “potentially” to that which “actually” is. Aristotle thus defines ἐνέργεια (*Metaphys.* VIII. 6, p. 1048 *Bekk.*): “ἐνέργεια supposes the existence of a thing, but not in that way in which we talk of its existing δυνάμει. We talk of a thing existing δυνάμει, when, for instance, we say that the statue of Hermes is in the wood, and the half in the whole, because it can be deducted, and that the person who does not speculate is scientific, provided he has the power of speculation: but as for that which is ἐνέργειᾳ (now our meaning is clear from an induction of particulars, and it is not necessary to seek a definition of every thing, but we must also take analogy into the account), it stands related to the other as that which builds to that which is capable of building, as waking to sleeping, as seeing to having the eyes shut, but being able to see, as that which is separated from matter to the material, as that which is worked out to that which is not. Of these contrasts let us call the former ἐνέργεια, and the latter τὸ δυνατόν.” We learn from this that the opposition of δύναμις to ἐνέργεια stands much on the same footing with that of the same word to ἐντελέχεια. We are not, however, to suppose that ἐντελέχεια and ἐνέργεια are synonyms, though it must be confessed that the distinction between them is not always strongly marked. The word ἐνέργεια signifies an acting, exertion, or operation. Thus, in the celebrated definition of the *summum bonum* in the *Ethics* (I. 7, § 14) it is said to be an operation, exertion, or acting of the soul, according to virtue (τὸ ἀνθρώπινον ἀγαθὸν ψυχῆς ἐνέργεια γίνεται κατ’ ἀρετήν). Now he says at the very beginning of the same work, that “this *summum bonum* is an end (τέλος); but there is a difference between ends, for some are operations (ἐνέργειαι), and others are certain works (ἔργα) besides these operations; and in cases where there are any ends collateral to

the actions (πράξεις), in these cases the works (ἔργα) are better than the operations (ἐνέργειαι); still it does not follow that an operation, which terminates in itself and produces no ἔργον, should be inferior to one that does, in other words, that a πρακτικὴ ἐνέργεια should rank lower than a ποιητικὴ ἐνέργεια". From this it appears that the ἐνέργεια is a mere operation or act, whereas the ἐντελέχεια is never spoken of as an act, but as a state ensuing upon an act: thus, Aristotle says (*Phys.* III. 3) that motion is in that which is moved, for it is the ἐντελέχεια of that which is moved, and is produced by the moving force, and the ἐνέργεια of the moving force is the same. Now the passage from the δύναμις to the ἐντελέχεια consists in motion, which is a sort of imperfect ἐνέργεια (ἢ τε κίνησις ἐνέργεια μὲν τις εἶναι δοκεῖ, ἀτελὴς δέ, *Phys.* III. 2), and again, motion is the ἐντελέχεια of that which virtually exists, so far as such a thing can be called an ἐντελέχεια (*Phys.* III. 2), and motion differs from ἐνέργεια in this, that the former implies change, the latter continuance (*Metaphys.* VIII. 6): therefore, ἐνέργεια is not ἐντελέχεια, but only tends to it, as Aristotle distinctly explains it from the primary meaning of the two words; τὸ γὰρ ἔργον τέλος, ἡ δὲ ἐνέργεια τὸ ἔργον. διὸ καὶ τοῦνομα ἐνέργεια λέγεται κατὰ τὸ ἔργον καὶ συντείνει πρὸς τὴν ἐντελέχειαν (*Metaphys.* VIII. 8, p. 1050 *Bekk.*), that is, the work (ἔργον) being the end (τέλος), and being implied in the word ἐν-έργ-εια, this last may be considered as tending to the ἐν-τελ-έχ-εια, in which the τέλος is contained. Again, he says (*Metaphys.* VIII. 3, p. 1047), ἐλήλυθε δ' ἡ ἐνέργεια τοῦνομα, ἡ πρὸς τὴν ἐντελέχειαν συντιθεμένη καὶ ἐπὶ τὰ ἄλλα, ἐκ τῶν κινήσεων μάλιστα· δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἡ κίνησις εἶναι. διὸ καὶ τοῖς μὴ οὖσιν οὐκ ἀποδιδόασιν τὸ κινεῖσθαι, ἄλλας δὲ τινὰς κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα, κινούμενα δ' οὐ. τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργεῖα ἔσονται ἐνεργεῖα. τῶν γὰρ μὴ ὄντων ἓν ἐν δυνάμει ἐστίν· οὐκ ἐστὶ δέ, ὅτι οὐκ ἐντελεχεία ἐστίν. "The name ἐνέργεια, i. e. operation or action, which is joined to ἐντελέχεια, and occurs also in other combinations, is derived principally from motions; for motion and action are generally identified. Wherefore motion is not attributed to nonentities, but something else is predicated of them, for instance, that they are conceivable or desirable, but not that they are moved. And the reason is that if we

attributed *motion* to them, we should attribute *action* to things which do not *actually* exist. Some nonentities do indeed exist *virtually* or *potentially*, but not *actually*, for they do not exist *ἐντελεχεία*". From all this it clearly appears that Aristotle derived *ἐντελέχεια* from *ἐν*, *τέλος*, and *ἔχειν*, on the analogy of *νουνεχής*, &c., and that he meant by it the acting and efficient principle of all those which exist potentially (*δυνάμει*) and may be otherwise; that is to say, it is their absolute definition—*ἐπὶ τοῦ δυνάμει ὄντος λόγος ἡ ἐντελέχεια* (*de Anim.* II. 4, § 4), and *τὸ δὲ τί ἦν εἶναι οὐκ ἔχει ὕλην τὸ πρῶτον ἐντελέχεια γάρ* (*Metaphys.* XII. 8); whereas *ἐνέργεια* is the act of that which cannot be otherwise (*de Anim.* III. 7); it is a kind of motion tending to *ἐντελέχεια*, but not attaining to it, except in those cases in which the *τέλος* is the *ἐνέργεια* itself. We must not overlook the distinction between *ἐνέργεια* and *ἔξις*, which are also opposed to one another, not, however, as *δύναμις* is to *ἐνέργεια*, for *ἔξις* is much nearer to *ἐνέργεια* than to *δύναμις*. Actions (*ἐνέργειαι*) proceed from, and return to, the universal action (*ἔξις*), which is the origin and end of all action: thus, a brave action proceeds from the habit of bravery (*ἔξις*, i. e. *ἀνδρεία*), and bravery is the end (*τέλος*) sought by the brave man (*Arist. Eth.* VII. 10): thus too, *αἴσθησις* is a *ἔξις*, but *κίνησις*, as we have before shown, is an *ἐνέργεια*—*ἡ μὲν γὰρ αἴσθησις ἔξις, ἡ δὲ κίνησις ἐνέργεια* (*Topica*, IV. 5. p. 125 Bekker). To return, then, to the point from which we started, the soul is the *ἐντελέχεια* and not the *ἐνέργεια* of the body, because the soul is incapable of motion—*ἐν τι τῶν ἀδυνάτων τὸ ὑπάρχειν ψυχῇ κίνησιν* (*de Anima*, I. 3, § 1).

We trust that the meaning of this Aristotelian term is now established, from the writings of the philosopher; so that Hermolaus Barbarus would have done better if, instead of consulting the Evil Being about the meaning of the word, according to the absurd story told by Crinitus (*de Honesta Disciplina*, lib. VI. c. 2), he had been content to look through his Aristotle. We now proceed to show, notwithstanding the contrary opinion of some great Greek scholars, including Cicero, that *ἐντελέχεια* is, etymologically as well as in signification, totally distinct from the older compound *ἐνδελέχεια*. It is remarkable that Cicero, who was aware that the word was coined by Aristotle, should have

given a translation of it applying exactly to the older word, which he must have met with in his Plato. He says (*Tusculan. Disput. I. 10*), *Aristoteles*,—*quum quatuor nota illa genera principiorum esset complexus, e quibus omnia orirentur, quintam quandam naturam censet esse, e qua sit mens. Quintum genus adhibet vacans nomine; et sic ipsum animum ἐντελέχειαν appellat novo nomine, quasi quandam continuatam motionem et perennem.* Now the word ἐνδελεχῆς does signify *perennis*, and ἐνδελέχεια implies continuance and duration, as appears from the following passages, some of which are adduced by Näke (*in Chærilum*, p. 177). Chærilus (p. 169, Näke):

πέτρην κοιλαίνει ῥανὶς ὕδατος ἐντελεχείῃ (read ἐνδελεχείῃ).

Euripides (*Perithous apud Valcken. Diatrib. p. 39*):

ἄκριτος δ' ἄστρον
ὄχλος ἐνδελεχῶς ἀμφιχορεύει.

Crobylus (*apud Athenæum p. 429 D*, repeated p. 443 F):

τὸ δ' ἐνδελεχῶς μεθύειν τίν' ἡδονὴν ἔχει;

Diodorus (*apud Athenæum*, p. 431 D):

εἰ τὸ παρ' ἑκάστον ἐνδελεχῶς ποτήριον
πίνειν τὸ λοιπὸν τοὺς λογισμοὺς αὐξάνει.

Plato (*Legg. IV. p. 717 E*): μνήμην ἐνδελεχῇ παρεχόμενον. (*Tim. p. 43 C*): μετὰ τοῦ ῥέοντος ἐνδελεχῶς ὀχετοῦ. (p. 58 C): τὴν αἰεὶ κίνησιν τούτων οὖσαν ἐσομένην τε ἐνδελεχῶς παρέχεται, exactly Cicero's *continuata motionem et perennem*. (*Respubl. VII. p. 539 D*): ἀρκεῖ δὲ ἐπὶ λόγων μεταλήψει μείναι ἐνδελεχῶς καὶ ξυντόνως μηδὲν ἄλλο πράττοντι. From which passages of Plato, it is quite certain that we ought to read in *Legg. X. p. 905 E*, ἄρχοντας μὲν ἀναγκαῖόν που γίγνεσθαι τοὺς γε διοικήσοντας τὸν ἅπαντα ἐνδελεχῶς οὐρανόν. Besides these passages, we have in the Lexicographers the following notices; *Bekker. Anecd. p. 251, 24*,—ἐνδελεχεστάτης: συνεχεστάτης καὶ ἀδιαλείπτου; *Hesych. ἐνδελεχεῖ*: πυκνάζει, Λάκωνες (where the last word, as Ruhnken observes in the *auctarium*, belongs to the gloss ἐνδεκαδίκος); ἐνδελεχισμός: ἐπιμονή (on which *Toup, Vol. iv. p. 260*, quotes *Josephus XI. 4. p. 555*, ἡγαγον δὲ καὶ τὴν σκηνοπηγίαν κατ' ἐκείνον τὸν καιρόν,—καὶ

τοὺς καλουμένους ἐνδελεχισμούς); ἐνδελεχῶς: ἀδιαλείπτως, συνεχῶς, ἐπιμόνως. And Näke quotes from Basilus, τὸ γὰρ ἐνδελεχὲς τὸ πυκνὸν καὶ συνεχές. From all this it is clear that ἐνδελεχής, ἐνδελέχεια, &c., were in Cicero's head when he gave the translation of ἐντελέχεια, which we have quoted, and that he probably thought the two words were identical. In this he is borne out by only two authorities; the first is a joke of Lucian's, who makes the letter δ complain that τ has robbed him of his place in ἐνδελέχεια—ἀκούετε, φωνήεντα δικασταί, τοῦ μὲν δ λέγοντος, ἀφείλετό μου τὴν ἐνδελέχειαν, ἐντελέχειαν ἀξιοῦν λέγεσθαι παρὰ πάντας τοὺς νόμους (*Judicium Vocalium*, p. 95, *Hemsterh.*); the other is a gloss of Gregorius of Corinth, who says (p. 155) that the Attics write ἐντελέχεια for ἐνδελέχεια. But these two authorities only prove that the Aristotelian word had become more common than the older compound, not that it was synonymous with it or had superseded it, for we find the older word in the Septuagint and in Josephus. The earlier scholars, however, were quite misled by Cicero: Politian (*Miscell.* cap. 1) and Andreas Schottus (*Tull. Quæst.* IV. 12) tried to justify his interpretation: Scaliger thought the only difference between the two words was one of pronunciation, probably like that between ἔντος and ἔνδον: in fact, it was a great question at the revival of letters how the word ought to be written. Rabelais, with his usual learning and discrimination, saw that in Aristotle, at all events, the proper orthography was ἐντελέχεια. In the chapter headed *Comment nous arrivâmes en royaume de la Quinte Essence, nommée Entelechie* (*Liv.* V. ch. 19) he says, *Aristoteles, prime homme, et paragon de toute philosophye, feut parrain de nostre dame royne: il, tresbien et proprement, la nomma Entelechie. Entelechie est son vrai nom—qui aultrement la nomme erre par tout le ciel.* Yet, notwithstanding this denunciation, some, even of modern scholars, have thought that the words ἐνδελέχεια, and ἐντελέχεια, were the same. Such appears to have been the opinion of Hemsterhuis, and a living scholar has endeavoured to establish their equivalence by etymology. Döderlein asserts (*Lat. Synonyme und Etymol.* I. p. 22) on the analogy of *creber, celebr*; κρύπτω, καλύπτω; φράσσω, φύλασσω; *cresco, glisco*; &c., “that ἐντελέχεια is only another pronunciation of ἐντρέχεια, the Platonic expression for *solertia*;

and he agrees with Hemsterhuis (*ad Lucian*, T. I. p. 95) in thinking, that Greg. Cor. p. 155 has rightly explained ἐνδελείχεια as only a dialectical variety, of which perhaps there is some vestige in τρέχειν and δραμεῖν." In the first place, we believe there is no such word as ἐντρέχεια in Plato, and the adjective ἐντρεχής, which occurs only once (*Resp.* VII. p. 537 A), does not, in the slightest degree, approximate to the meaning either of ἐνδελείχεια or of ἐντελέχεια: in the latter the idea of motion is expressly excluded by Aristotle. And, in the second place, even if the sense did not guide us to a discrimination between these two words, the etymology would. Aristotle himself has hinted the derivation of his own coinage ἐντελέχεια from ἐντελής and ἔχειν, and ἐνδελεχής is, without doubt, a compound of ἐν with δολιχος, an adjective used, indeed, to signify length in distance, but more frequently applicable to express length in duration, as δολιχὴ νόσος, δολιχὸς πλόος, &c., and δολιχόν is used as an adverb to signify simply continuance and length of time, as in Homer, *Iliad* x. 52,

ἔργα δ' ἔρεξ' ὅσα φημὶ μελήσεμεν Ἀργείοισι
δηθά τε καὶ δολιχόν.

So that in meaning it is very near akin to ἐνδελεχής. With regard to the form of the compound, it may be observed that the termination is not seldom altered from -ος to -ης in such words; thus from γένος we have ἐγγενής; φίλος, προσφιλής; κάλος, περικαλλής; μακρὸς, εὐμηκής; &c., not as grammarians say, because it has passed through a substantive in -ος, εος, but by the common addition of the element -γα. The change from ο to ε in the first syllable of the adjective is due to the greater weight of ἐνδελεχής (above, p. 300). The element of δολιχὸς is found in all the languages of the Indo-Germanic family. In Sanscrit it appears as the root *dr̥h* "to grow", adjective *dīrgha* "long", Zend *daregha*, Persian *dīra*, Slavonic *dolgŭŭ*, Bohemian *dlauihy*, Polish *dlugi*, Servian *dyg*, Lithuanian *ilga*, Lettish *ilg*, Old Prussian *ilga*, and, probably, by dissimilation, the Latin *longus*, Gothic *laggs*, German *lang*, English *long*. Pott suggests (*Etym. Forsch.* I. 87) that *in-dulgere* belongs to this root, with the original signification of *laxius*, or *longius reddere, remittere*, just as *languere* seems to be connected with *longus*, and we admit the derivation as at least probable: the

meaning to which he refers seems to be found in Virgil, *Georgic*, II. 276,

*Sin tumulis acclive solum collesque supinos,
Indulge ordinibus,*

and in the preface of Aulus Gellius, *Animus, interstitione negotiorum aliqua data, laxari indulgerique potuisset*. The Sanscrit, Zend, and Persian forms approach nearly to the Greek $\delta\acute{o}\rho\nu$, $\delta\rho\upsilon\varsigma$, in which some meaning of growth and length is obviously contained. The Lettish verb *ilgt* "to delay," also belongs to this class: also the Anglo-Saxon *telg* "a plant", the Gothic *tulgjan* "to strengthen", and the Latin *largus* (Pott, *Etym. Forsch.* I. p. 251).

NEW CRATYLUS

BOOK IV.

CHAPTER I.

THE PERSONS.

BOOK IV.

THE VERB.

THE
NEW CRATYLUS.

BOOK IV.

CHAPTER I.
THE PERSON-ENDINGS.

THOSE persons, whose notions of the nature of a verb are derived from the appearance of that part of speech in our own and indeed in most modern languages, will not be able to understand very well the meaning of the term as applied in the grammars of the ancient languages. A verb in English can only express the copula or the copula and predicate of a sentence: it can never express the subject, in other words, it is impossible that any verb can be used *impersonally*, as the grammarians say. But in the ancient languages, a verb may be used in the third person without any subject or nominative case expressed: and unless some particular emphasis is required, the nominative of the first and second persons is regularly omitted; so that the whole logical proposition is included in a single word.

The explanation of this follows from what we have said of the substitution of prepositions for case-endings, &c.; the original verb contained the pronominal elements or symbols of the relations of place, which constituted at once the case-endings of the noun and the persons of the verb. A bare root or stem without a pronominal suffix could no more form a noun, than a modification of it could form a verb without a corresponding person-ending. By the lapse of time, the introduction of writing, and the other causes which are always at work upon a

language as long as it continues in vogue, the old forms degenerated into those naked shapes in which we find but few remnants of the original clothing. A desire for greater distinctness in the case of the verb led to the introduction of a system of nominative cases, or the express statement of the subject, and then as the person-endings became less necessary, they were gradually dropt; the same thing happened to the cases of the noun. We have shown that the Sanscrit language, which had no prepositions in the ordinary sense of the word, had a most complete system of case-endings; the person-endings of the verb are also more strongly marked in Sanscrit than in Greek, because the Indians were less accustomed than the Greeks to state the subject of the proposition, and in general the language had not attained to a full logical developement. With the exception of the verbs in $-\mu$, and some of the secondary forms of the common verbs, the person-endings are, as we shall soon show, absorbed in the more modern state of the Greek language.

It has long been perceived that the terminations of the verbs in $-\mu$ are person-endings; but it has been supposed by modern scholars (for instance, by Thiersch in his Grammar, and Pott) that these person-endings must needs be nominative cases, the root of the verb constituting the predicate, and the connecting syllable the copula. Nothing, in our opinion, can be more unphilosophical than such a supposition. Even if man, in the rudest and earliest times, had excogitated all the rules of logic which were adumbrated by Plato and set forth as a novelty by Aristotle, it appears to us inconceivable that he should have arranged predicate, copula and subject in an order converse to that which every logician knows to be the natural one. Besides, when the system of nominative cases was introduced, the nominative of the first person was in Latin *ego*, in Greek $\epsilon\gamma\omega\nu$, in Sanscrit *aham*; of the second in Latin *tu*, in Greek $\tau\upsilon$, subsequently $\sigma\upsilon$, in Sanscrit *tvā*; and, as we have shown in the preceding book, the nominative sign in nouns expressing the third persons was $-s$; now the oldest forms of the singular person-endings in these languages, so far as they have come down to us, appear to have been $-mi$, $-si$, $-ti$, of which the first and third manifestly refer to the objective cases of the same pronouns: indeed in the third person, when the nominative case system came into full play, the nominative s was substituted for the objective t

in the Greek language even in those verbs which followed the older form of conjugation. In Hebrew it is well known that the person-endings are connected with the objective cases of pronouns; we consider it equally certain that the same holds of the person-endings of the Indo-Germanic verbs, and it has been fully proved that such is the case in the Celtic languages by an ingenious writer who has lately vindicated the claim of those languages to an eastern descent. The fact is, that the original verb stands on precisely the same footing with the noun; it is a word, of which the element or differential part might be found in a noun, the constant part consisting, like that of the noun, in a pronominal element, expressing some relation of place. Thus, $\delta\acute{\iota}\delta\omega\text{-}\mu\iota$ would signify "giving here", i. e. where the speaker is; $\delta\acute{\iota}\delta\omega\text{-}\sigma\iota$, "giving where the person addressed is"; $\delta\acute{\iota}\delta\omega\text{-}\tau\iota$, "giving there", i. e. at any other place. The root is $\delta\acute{o}$ -, affected by *guna*, and reduplicated to express more vividly the action, a custom which we find in the unformed dialects of rude tribes even at the present day. The same root is found in $\delta\acute{\omega}\text{-}\rho\acute{o}\text{-}\nu$, "a giving away" ($\text{-}\rho\acute{\alpha}$ -), the case-ending of which implies mere location, and does not, like the person-endings of the verb, mark a particular relative place. As the verb gradually received its developement, we find that the differences of mood and tense affect the terminations as well as the root; but this is sufficiently intelligible, for of course the conjugation would not receive its completion till the formation of sentences, and therefore the expression of the nominative or subjective cases, had become necessary and common; and this, by rendering the person-endings less important, would also make them yield more readily to the laws of euphony, which required modifications of the termination corresponding to those of the root or body of the word.

In treating of the person-endings we must consider them as we would nouns. The number designated, whether singular, dual, or plural, is to be explained as we have done the numbers of nouns. The division of verbs into different voices, one of which expresses that the action is considered as affecting the speaker or person spoken of, and the other, as affecting some other person or thing, is merely a relation of case; the former is that relation of case which we call the locative, the latter that which is termed the instrumental. But we must also treat of the person-endings, thus affected by number and voice, in their appearances

as primary or secondary forms ; that is, as they appear affected or unaffected by the modifications of tense and mood to which the verb in its full developement is subjected. We shall, therefore, first take the primary or simplest forms, treating them successively as they appear in the different numbers and voices, and then proceed to the discussion of the secondary or subordinate forms. Throughout we shall presume a reference to the chapter on the pronouns.

A. PRIMARY FORMS.

1ST PERSON SINGULAR.

That the conjugation in *-μι* is the original one may be proved from the Greek language alone, without the aid of comparative philology. In the first place, those verbs which in the classical ages of Greek literature were still conjugated in *-μι*, such as *εἶμι*, *δίδωμι*, *ἵστημι*, *φημί*, &c., all convey the most elementary ideas ever expressed by verbs : “being”, “giving”, “standing”, “saying”, &c. They are words which must have existed in the oldest and rudest state of the language, and therefore could not have owed their existence to the observation of analogies which had arisen subsequently to that earlier state. Again, the conjugation in *-μι* is departed from only in a few tenses (principally the present and imperfect active) of the ordinary verbs ; the other tenses all retain traces, more or less distinct, of the original form. Thus, though we have *τύπτω* we have *τύπτομαι* (which is perfectly analogous to *δίδομαι*), *τύπτοι-μι*, *ἐτυψά-μην*, &c. Finally, the change from *-μι* to *-ω* is explicable and may be supported by orthographical analogies ; the converse is not. In all languages we find a tendency to abridge words as far as is consistent with the preservation of their meaning, and in those which are built on the system of composition we observe a continual conflict for mastery between the body of the word and the suffix. The original verbs were very short and simple, and, even when the person-ending was retained at full length, did not fatigue the voice of the speaker ; there was, therefore, no immediate reason for abolishing the person-endings even after they had forfeited their claim to indispensable utility. In other roots, which the necessities of language required, the verbal element would be longer, sometimes composed

of two distinct stems or a stem and a preposition, sometimes of a heavy, hard-sounding stem, with many consonants, or in general the present tense would be strengthened by insertion, whether of *guna* or *anusvâra*, or by addition of some pronominal element; this of itself, on the principle we have mentioned, would interfere materially with the termination, which, when it became less necessary, would be dropt altogether. After this custom of dropping the ending in the present tense had become common, new verbs would be formed on the new, rather than on the old system, and so at length the number of verbs in *-μι* would become comparatively inconsiderable. Supposing *-μι* to be the original ending of the first person, the most natural method of avoiding an additional syllable, while the meaning of the ending was still retained, would be by keeping only the consonant and omitting the final short vowel; this plan we find adopted in Latin, though *su-m* and *inqua-m* are the only verbs which exhibit it in the present indicative; in the other tenses and moods *m* is the regular ending, as in *amaba-m*, *ame-m*, &c. Its omission at the end of the present indicative is perhaps only another instance of that use of the final *anusvâra* in Latin, which we have pointed out in treating of the accusative case; for it will be recollected, that the final *m* is liable to ecthipsis in verbs as well as in nouns. But in Greek *-μ* cannot, according to the laws of euphony, stand at the end of a word; in shortening the ending, therefore, in the way we have supposed, the *m* must either have been struck out, or some representative must have been substituted for it. We find both methods adopted. The former is the common one in the present tense, where we have *τύπτω* for *τύπτο-μι* or *τύπτο-μ*, the latter however appears in the secondary forms, as *ἐτυπτο-ν* for *ἐ-τύπτο-μι*. This interchange of *m* and *n* we have also observed in the accusative case. Bopp is inclined to suppose (*Vergl. Gramm.* p. 626), that *τύπτω-μι*, not *τύπτο-μι*, would be the original form of *τύπτω*, in which he is probably guided by the analogy of the Sanscrit verbs in *-âmi*, and the Greek *δίδωμι*, *τίθημι*, &c. It seems better to conclude, that, in cases where the verb-root ends with a consonant, the vowel used to connect the stem with the suffix would be a short *o* or *ε*, the length of the endings being occasioned by the principle of compensation which we so often find in the Greek and other languages. Thus *τύπτω* would stand for *τύπτομι*, as *τύπτεις*

for *τύπτεισι*, and *τύπτει* for *τύπτετι*. The reader will recollect the formation of the comparative-endings *-ων* from *-ους*, *μᾶλλον* from *μᾶλιον*, &c. The cases of *δίδωμι*, &c., are different; in these the verb-root (*δο-*, &c.) ends with a vowel, the lengthening of such a root is quite in accordance with analogy (comp. *δῶ-ρον*, &c. from the same root).

Upon the whole, we may safely conclude, that the first person singular in Greek, Latin, and Sanscrit was always designated by *m-*, in the present indicative of the old forms of those languages. That this *m-* was the element of the objective cases of the first personal pronoun is obvious. It is also clear enough that when the verb is active, the person-ending must needs express an agent, in other words, the action or doing implied by the root must be set forth as proceeding from him; this is effected in the flexion-system of the languages we are considering, by putting the name of the agent in the instrumental, ablative, or, what is equivalent in Greek, the genitive case. The strong resemblance which subsists between the instrumental and ablative of the third personal pronoun in Greek, and the terminations (*-τω*, *-των*) of the third person imperative active cannot be overlooked: and it has been remarked by an able philologist (*Quarterly Review*, Vol. LVII. p. 99, note), that “the ancient Latin imperatives, *estod*, *vivitod*, and the analogous veda-imperative, *jivatât* = *vivito*, are unequivocally in the *ablative* form.” In all probability the ending *mi* is merely an abbreviation of the instrumental *mê* = *mai*, to which it stands related as *περί* does to *παρά*.

In the middle, however, we should expect to find indications of a locative-case in the personal suffix: for in this voice the action is supposed to end with the agent, as indeed is implied in the name *atmanê-padam* or “self-form”, given to it by the Sanscrit grammarians. That the passive verb, in the languages which we are considering, must have been originally a middle or reflexive verb, is implied in the existence of a first person, if the explanation we have given of the personal suffixes be the correct one, for the person must express that the action begins and ends at the same point.

The middle or passive person-endings are distinguished from the active by a greater weight and fullness of form. The first person middle in Greek is *-μαι*, in Sanscrit it is wanting, but

the other persons exhibit a similar alteration by *guna* of the persons in the active. As the active *-mi* points to the instrumental *mé*, so *-mai* must point to the locative *-mayi*, the person-ending being, in each instance, an abbreviation of the regular case of the pronoun. Thus, if $\delta\acute{\iota}\text{-}\delta\omega\text{-}\mu\iota$ means "a giving effected by me" or "I give", $\delta\acute{\iota}\text{-}\delta\omega\text{-}\mu\alpha\iota$ will signify "a giving of which I am the object," i. e. "I give myself," or "I am given," the giver being presumed.

Bopp (*Vergl. Gramm.* p. 680) and Kuhn (*de Conjugatione in -\mu\iota*, p. 25) have attempted to show that the agent, as well as the object of the action, is expressed in the middle or passive person-ending, namely, that *-\mu\alpha\iota* stands for *-\mu\alpha\mu\iota*, or *-\mu\alpha\mu\alpha*, and so on. This attempt has probably arisen in the erroneous belief, that the person-endings are nominative cases, which, we have shown, is certainly not the fact. Considering them as standing on the same footing with the inflexions of nouns, there is, undoubtedly, no more reason why part of the active-ending should be included in the passive, than there would be for supposing that the locative ending must include the genitive or instrumental. We shall return to this when we come to the secondary forms, on which the supposition is founded.

2ND PERSON SINGULAR.

The characteristic of the second person in Greek, is *-s*, which we may consider as a shortened form of *-\sigma\iota* (which is retained only in the Doric $\epsilon\sigma\text{-}\sigma\iota$, though it appears consistently in the Sanscrit, Zend, and Slavonic), just as the Latin *-m* and Greek *-v* at the end of other tenses are of the original *-\mu\iota*. Besides this, we find a termination *-\theta\alpha*, the connexion of which with the second personal pronoun, we have before pointed out (p. 270). In the imperative it appears as *-\theta\iota*. This ending corresponds to the Sanscrit *-tha*, *-dhi*. Buttmann will not allow (*Ausführl. Sprachl.* § 78. 7 Anm. 3), that *-\theta\alpha* can be considered a termination; he joins it with the σ -, which generally precedes it. That, however, *-\theta\alpha* not *-\sigma\theta\alpha* is the ending, will appear from the following considerations, in addition to the argument derivable from the analogy of the Sanscrit. The two words, in which this termination most frequently occurs, are $\omicron\iota\sigma\theta\alpha$, $\eta\sigma\theta\alpha$, obviously words of great antiquity. The first of these stands

for $\omicron\iota\delta\text{-}\theta\alpha$ (the root is $\text{F}\iota\delta\text{-}$), the second for $\epsilon\text{-}\epsilon\sigma\text{-}\theta\alpha$, the root being $\epsilon\sigma\text{-}$. In these two instances, then, $\text{-}\theta\alpha$ is obviously the termination, as is $\text{-}\theta\iota$ in the imperatives $\iota\sigma\text{-}\theta\iota$, $\phi\acute{\alpha}\text{-}\theta\iota$, $\iota\text{-}\theta\iota$, $\kappa\lambda\upsilon\text{-}\theta\iota$, $\sigma\tau\eta\text{-}\theta\iota$, &c. Although the σ cannot be referred to the root in such forms as $\tau\acute{\iota}\theta\eta\sigma\theta\alpha$, $\epsilon\phi\eta\sigma\theta\alpha$, &c., they admit of an easy explanation; for in the course of time the pronominal nature of the termination would be forgotten or overlooked, and σ the ordinary mark of the second person would be inserted on a mistaken analogy, just as we sometimes find $\omicron\iota\sigma\text{-}\theta\alpha\varsigma$ for $\omicron\iota\sigma\text{-}\theta\alpha$. This is Bopp's opinion (*Vergl. Gramm.* p. 655); he formerly thought with Buttmann, that the termination was $\text{-}\sigma\theta\alpha$: in the "Annals of Oriental Literature" (I. p. 42) he remarks, "the Greek language is very fond of prefixing σ to θ , as is manifestly evinced by the passive participle formed by the suffix $\theta\epsilon\iota\varsigma$; but prefixing σ to the θ , there is formed $\omicron\iota\sigma\theta\epsilon\iota\varsigma$, $\mu\upsilon\eta\sigma\theta\epsilon\iota\varsigma$, $\chi\rho\eta\sigma\theta\epsilon\iota\varsigma$, &c. Therefore, it is no wonder if the Greek has formed $\sigma\theta\alpha$ out of the Sanscrit termination $\text{-}\text{tha}$." In the second person of the Latin perfect, we look upon $\text{-}\text{sti}$ as the termination, the s being perhaps a substitute for the lost aspirate of the t , so that $\text{-}\text{sti}$ is equivalent to the Sanscrit $\text{-}\text{tha}$.

The characteristic of the second person passive, in the Greek verbs in $\text{-}\mu\iota$, is $\text{-}\sigma\alpha\iota$, as in $\tau\acute{\iota}\theta\epsilon\text{-}\sigma\alpha\iota$; in the ordinary verbs this is contracted to $\text{-}\eta$ as in $\tau\acute{\upsilon}\pi\tau\eta$ for $\tau\acute{\upsilon}\pi\tau\epsilon\sigma\alpha\iota$. It is very remarkable, that, though all Greek verbs keep the full form in $\text{-}\mu\alpha\iota$ for the first person, the second person is shortened in this way; and conversely, though in Sanscrit the full form of the second person is invariably preserved, the first person of the passive is abbreviated quite analogously to the abbreviation of the second person in the passive of Greek barytone verbs. Thus, we have

	<i>bhar-é</i>	$\phi\acute{\epsilon}\rho\text{-}\sigma\text{-}\mu\alpha\iota$,
but	<i>bhar-a-sé</i>	$\phi\acute{\epsilon}\rho\text{-}\eta$.

We have mentioned this omission of the σ in the middle of Greek verbs before, as analogous to a similar abbreviation in the genitive of nouns (see above, p. 320), and shall return to it again.

3RD PERSON SINGULAR.

Of the third person singular we have little to say, after the general remarks which we have made on the two preceding suf-

fixes. In the Doric forms of verbs in $-\mu\iota$ it is written $-\tau\iota$, which is either softened into $-\sigma\iota$ in the ordinary dialects, or represented by ι , as is the case in all the barytone verbs.

In the passive the regular ending $-\tau\alpha\iota$ is invariably preserved in the primary forms.

1ST PERSON PLURAL.

The arguments which have been advanced to prove the original identity of the dual and plural of nouns applies also to these numbers in the verb; besides, Buttmann has shown (*Ausführl. Sprl.* § 87. 4 *Anm.* I.), that, in the case of the Greek verb, the dual is actually nothing but an older form of the plural. We shall, therefore, consider these numbers together.

In the active voice the Greek makes no distinction between the dual and the plural of the first person; the Sanscrit presents the form *vas* or *va* for the first person of the dual in the active voice, but this is only a modification of the plural *mas*; compare *vayam* for *mayam*, &c. (Bopp, *Vergl. Gramm.* p. 331).

The ordinary characteristic of the first person plural in Greek is $-\mu\epsilon\nu$, the older form is $-\mu\epsilon\varsigma$, which is more analogous to the Latin $-m\ddot{u}s$, and to the Sanscrit $-m\ddot{a}s$. If our supposition that the singular $-mi$ stands for $-m\acute{e}$, the instrumental of the pronoun, be correct, then $-m\acute{e}s$ the characteristic of the first person plural in old High German, as well in the secondary as in the primary forms, sets this fact more clearly before us. This $-m\acute{e}s$ cannot stand for $m\acute{a}s$ as Bopp suggests (*Vergl. Gramm.* p. 635).

When we reflect that the idea of "We" i. e. "I + you," cannot be considered as contained in the *plural* of the first personal pronoun, we shall refrain from adopting the simplest method of explaining this characteristic, namely, by supposing that the final *s* is merely the ordinary mark of the plural number. If, instead of this, we consider the last letter as the characteristic of the second person singular, which is of course allowable, we shall find this view harmonize with all the other phenomena of the plural characteristics; it is, too, the only one which is consistent with our *a priori* expectations. In the Vêda-dialects we find the form $-ma-si$ as the termination

of the first person plural of the active voice: this shows the two pronominal elements at full length.

In the passive voice, the terminations of the dual and plural of the first person are in the oldest Greek forms *-μεσθον*, *-μεσθα*, *-μεθεν*, the more recent forms being *-μεθον*, *μεθα*, where the *σ* is omitted, as in the secondary form of the first person plural of the active verb in Sanscrit. We are inclined, however, to consider the dual form *-με-θο-ν* or the Æolic *-με-θε-ν*, as the genuine characteristic of the first person plural of the passive voice. The first syllable represents the element of the first person singular, the *θε-* (*θο*, *θα*) is, as we have shown, one of the forms of the second person singular, and the final letter is *-ν*, the oldest characteristic of the locative case, which is necessary to the passive voice.

The Indian languages furnish analogies confirmatory of this view. The characteristic of the Sanscrit active-dual is *vas*: that of the passive-dual *va-ha-i*. Here the *ha* stands for the second person (Bopp's *Vergl. Gramm.* p. 651). Thus, Sanscrit *va-ha* = Zend *va-za* = ἔχε; Sanscrit *dê-hi* = Zend *daz-dhi* = δίδω-θι, and conversely Zend *hista-hi* = Sanscrit *kisht'h'asi*, and Zend *dadhâ-hi* = Sanscrit *dadâ-si*. The syllable *hai* stands related to *hi* as *-σαι* does to *-σι*, that is, in the relation of locative to instrumental. The same may be said of the Zend *-mai-dhê* (for *-dhi* is one of the forms of the second personal pronoun), and of the Sanscrit *-mahê*, *-mahai*. The forms *-mahi*, *-vahi*, may be compared with the less genuine form *-μεθα*; they have all lost the final *n*, the passive characteristic or locative ending; we have pointed out a similar loss in *κα*, *κεν*; *ένεκα*, *ένεκεν*, *πρόσθα*, *πρόσθεν*; &c.

2ND PERSON PLURAL.

In Greek the second person plural of the active voice appears in a very mutilated state. It is invariably written *-τε*, or in the dual *-τον*. We are enabled, however, by the aid of the cognate languages to arrive at its real form. In Latin it is *-tis*, or *-tote*. In Sanscrit we find *-thas* as a dual or older form, and *-dha* as the plural, which is mutilated like the Greek. A comparison of the Greek dual *-τον* with the Latin plural *-tis*, and the Sanscrit dual *-thas*, leads us to conclude that it stands for *-τος*,

as $-\mu\epsilon\nu$ stands for $-\mu\epsilon\varsigma$ in the first person of the plural. We should, however, still be at a loss to explain the ending, were it not for the aid afforded us by the sister languages. It appears from the Sanscrit *tha-s*, that the second person dual is made up of a repetition of the second person singular, and this appears more clearly from a comparison of the Latin imperative ending $-tote = tva-te$, old Umbrian $-tu-to$.

This view is confirmed by the passive characteristic of the second person plural, which in the dual or older form is $-\sigma-\theta o-\nu$, and in which the repetition of the second person singular is manifest.

3RD PERSON PLURAL.

The third person plural presents us with difficulties considerably greater than either of the other two. It is very hard to determine with certainty the elements of which the characteristic is composed, and still harder to reconcile the dual with the plural.

It is only in the historical tenses of the ordinary Greek, that the second and third persons of the dual are distinguished from one another: in the primary forms they are the same in both active and passive, namely, both $-\tau o\nu$ in the former, and both $-\sigma\theta o\nu$ in the latter; in the secondary forms η is substituted for o in the third person. In Homer there are three passages in which we find the termination $-\sigma\nu$ in the third person of historical tenses, and Elmsley has shown (*ad Aristoph. Ach.* 733), that in the Attic writers the second person in the historical tenses was occasionally written $-\tau\eta\nu$. It may be laid down with Buttmann (*Ausführl. Sprachl.* § 87. *Anm.* 2 note), that in the Old Ionic the termination $-\sigma\nu$ was used for the second and third persons of the dual in all moods and tenses; in the Old Attic we find the following distinction,—

Primary tenses and conjunctive, 2nd and 3rd..... $\sigma\nu$,

Historical tenses and optative, 2nd and 3rd..... $\eta\nu$,

while in the more modern Greek the distinction was,

Primary tenses and conjunctive, 2nd and 3rd..... $\sigma\nu$,

Historical tenses and optative, 2nd $\sigma\nu$, 3rd..... $\eta\nu$.

The same distinction was observed in the imperative; only in this case the third person was distinguished by ω instead of η .

The letter *n*, in many modern languages an indistinct sound, has made its appearance at the end of Greek words as the representative of so many letters not much related to it, that it might seem strange to any one not acquainted with the freaks of language. It has been mentioned before that there are only four consonants which ever stand at the end of the word in Greek, *ν*, *σ*, *ρ*, and *κ*. Of these *ρ* occurs very seldom in this position, and *κ* only twice, in *ἐκ* and *οὐκ*, which, as we have shown, are peculiar exceptions. With this fact before us, we need not wonder that, when a consonant ought to stand at the end of a word, in order to represent a significant suffix reduced to its consonantal element, this consonant should so often be represented by *ν*, which even takes the place of *σ*, the only other consonant that frequently appears in the same way. Thus we have seen *-μεν* for *-μες*, and *-τον* for *-τος* or *-τες*. On the same principle, we may conjecture that the third person dual, *-τον*, stands for *-τοτε*, or that, as the second person-ending is made up of the element of the second personal pronoun twice repeated, the third should be constructed by a similar repetition of the third person. We must, therefore, consider the resemblance of the first and second persons of the dual in the active as well as in the passive voice, as either produced by accident, or by a mistaken analogy. In the passive, as *-σθον* in the second person stands for *σε-θε-ν*, a repetition, namely, of the second person singular with a mark of the locative case, so in the third person the same *-σθον* must stand for *-το-το-ν*, namely, a similar repetition of the third person singular with the same mark of the locative case. This may seem wonderful,—perhaps, at first sight, hardly credible,—but it is the only way of explaining the fact, and etymologically speaking there is nothing against it. The Sanscrit presents the two characteristics under a form in which we can more easily recognize the distinction of persons. In the active, the second person dual is *-tha-s* (for *-tha-tha* or *-tha-si*), the third *-ta-s* (for *-ta-ta*); in the passive, the second person dual is *-â-thâ-m* (for *-thâ-thâ-* with a locative ending); the third, *â-tâ-m* or *â-tê* (for *tâ-tâ* with a locative ending).

The genuine form of the third person plural in the Greek active verb in *-μι* is *-ντι*, which is still found in Doric remains (Buttmann, *Ausführl. Sprl.* § 107, *Anm.* 7, note). The Bœotians wrote *-νθι* (Böckh, *Corp. Inscript.* I. n. 1569 a. III). This is an

approximation to the ordinary Greek, in which the termination is *-σι* or *-σι* with a compensation for the *-ν*. The Dorians wrote *διδόντι*, the Bœotians *δεδόανθι*, the Attics *διδόασι* or *διδούσι*. We have mentioned before that the root of the verb *δίδωμι* is *δο-*, and the length of the penultima is occasioned by the insertion of a short vowel which produces the effect of a *guna* upon the root. That the *guna*-vowel might be *ο* as well as *ε* we have shown above (p. 303). Why this *guna* of the root does not take place in the plural *δίδομεν*, *δίδοτε*, *διδόντι*, we shall show when we come to treat of the effect produced by the weight of the person-suffixes. The first and second persons of the plural are proparoxytone, the third is paroxytone. As the contracted form *διδούσι* (as well as *τιθείσι*, *ἴστανσι*, *δεικνύσι*) is properispome, we may conclude that the accentuation of *διδόντι* is correct; that the *guna*-vowel was lost at a later period in the third than in the two other persons of the plural. This view is confirmed by the Bœotic *δεδόανθι* and the Attic *διδόανσι*. That a short *α* is frequently substituted for a *ν*, we have shown in treating of the declensions, and we shall find instances of it in the tenses of the verb: thus we have *κεκλίᾳται* for *κέκλινται*, *σωσοίᾳτο* for *σώσονται*, &c. The *ν* in *διδόντι* would therefore become a short *α*, and not a long one as in *διδόανσι*, unless we suppose an original form *διδοα-ντι* which became *δεδόανθι* in Bœotic, and, substituting *ᾱ* for *ν* and *σ* for *θ* according to the common practice, *διδοᾱ-ᾱ-σι* or *διδόανσι* in Attic. The greater weight of the person-suffix explains the form *τιθέαται*, *τιθένται*. The change of *διδόντι* into *διδούσι*, *τιθέντι* into *τιθείσι*, &c., is the same as that of *τύπτοντα* into *τύπτουσα*, *ἐνς* into *εἰς*, &c.

The Sanscrit presents us with the fullest analogy for this form of the third person, both in the active and the passive—the former being *-nti*, the latter *-nté* or *-ntai*. In Latin and old High German it is *-nt* in the active. The Latin passive in *r* we must discuss hereafter. But the most important analogy for this suffix, is that furnished by the Celtic languages, and first pointed out by Dr Prichard (*Eastern Origin of the Celtic Nations*, p. 134, foll.), who has clearly shown the connexion subsisting between the Welsh pronoun *hwynt* “they”, (written *ynt* when used as a suffix) and the Welsh characteristics of the third person plural, which, however, is *-nt*, and not, as he says, *-ant*, *-ent*, or *-ynt*, for the vowel in each case belongs to the

verb. He does not appear, however, to have taken the correct view of the relation which subsists between the pronoun *hwynt* and these suffixes in Welsh. The fact is, we conceive, that *hwynt* is a compound pronoun, like *aha-m* in Sanscrit; the last two letters have a distinct origin from the first syllable, and are capable of forming a termination by themselves, as is also the case with the last letter of *aha-m*, which we have seen used as a mark of the first person in verbs, although the first part of the word is never so used, any more than the Greek *ἐγώ*, or the first part of *ego-met* in Latin. That the first part of this compound pronoun has its representative in Greek, and the other cognate languages, we have elsewhere shown; it now appears that the termination *-nt* is also found in Greek, Latin, Sanscrit, and old German. That this termination is also a compound, is nearly certain. An able writer before referred to (*Quarterly Review*, Vol. LVII. p. 100) considers it analogous to the Esthonian *need* = *illi*, and derives it from a combination of the demonstrative roots *na* + *ta*. The latter we have already; of the former he gives the following instances:—*na* in the Finnish dialects “this” or “that”; Pali *nam* “that”; Greek *νιν* “him”, “her”, “them”; Sanscrit acc. dual, *nāu* “us-two”; Gr. *νῶϊ*; Slav. dat. *nama*; Plur. Sanscr. accus. *nas*; Zend *no*; Latin *nos*; Welsh *ni*; Slav. gen. *nas*; Pali *né*, *nā*, “those”. We have before stated our belief that all these have arisen from a mode of pronouncing the *t* of the demonstrative, which is still common, and in fact inevitable, when one has not a clear utterance. That *n* stands for this *t* in the person-endings is shown by the secondary forms *ἐτυπτε-ν* for *ἐτύπτετι*, &c., and we believe with Kuhn (*l. l.* pp. 23, 31), that the first consonant in the plural termination *-nti* is a representative of the demonstrative element *-t*, so that the whole is a repetition of the third person singular, perfectly analogous to that of the other persons which we have seen used to form their plural. The passive only differs by that greater fulness of form, which in the pronouns distinguishes the locative from the instrumental case.

It seems right that we should here make a few remarks on the person-endings in Latin. In the active these are preserved more faithfully than in the Greek, because the laws of the language do not forbid either *m* or *t*, the signs of the first and third person, to stand at the end of the word. In the present

indicative, the sign of the first person singular is invariably wanting, except in the case of *sum* and *inquam*. The passive presents much greater difficulties. If we compare *amo*, *amat*, *amant*, *amare*, with their passive forms *amo-r*, *amat-ur*, *amant-ur*, *amari-er*, we should be inclined at first to suppose that the termination *r*, or *er*, *ur*, was sufficient to convert an active into a passive form. But then, what does this termination mean, and how are we to explain *amaris* and *amamini*, which do not receive it? Bopp (*Annals of Oriental Literature*, I. p. 62. *Vergl. Gramm.* p. 688) and Pott (*Etymol. Forsch.* I. p. 133, 6) suppose that this final *r* is a representative of the reflexive pronoun, the termination of the second person singular being an inversion for *ama-sir*: Kuhn (*l. l.* p. 26 note) suggests that it may represent the radical consonant of the substantive verb. These conjectures are based upon views of the nature and origin of the person-endings, of which we have before expressed our disapprobation. Our opinion with regard to the origin of these passive suffixes, ought to be consistent with the view we have taken of the person-endings in Sanscrit and Greek; that is, we ought to be able to show that the final *-ŭr*, or more properly, *ēr* (*amari-ēr*), which marks the passive voice, is a mark of the locative case. Lassen has shown (*Rheinisches Museum* for 1834, p. 147), that in the tables found at Gubbio (*Iguvium*), commonly called the Eugubine tables, and containing a good specimen of the old language of the Umbrians, the proper locative-ending is *-me* or *-m*; thus, *tote-me Ijovine-m* "in the whole tribe *Iguvina*", *ocre-m fisie-m* "on the holy mountain;" and we have pointed out traces of this ending in the locative of certain Latin pronouns, used adverbially (above p. 216). It is also found in some nouns; thus, *partim* is used as the locative of *par(t)s*, and governs the genitive case, as in Terence, *Hecyr. Prolog.* II. 6.

*In his quas primum Cæcili didici novas,
Partim sum earum exactus, partim vix steti.*

In ordinary Latin, however, this locative has gone out of use, like the corresponding Greek one in *-ν*, and the classical writers use instead of it a genitive singular of the first declension, as *humi*, *Romæ*; or an ablative of nouns of the third declension or plural number, as *Tibure*, *Thebis*. We have mentioned above (p. 321), that the Greeks also used the genitive as a locative,

and that in the Sanscrit dual the genitive and locative were identical. Now the sign of the genitive in the old Umbrian is consistently *-r*, in all its three declensions, which correspond to the three first in Latin. Thus, to take the scheme given by Müller (*Gött. Gel. Anz.* for 1838, p. 58), we have,

	I. Decl.	II. Decl.	III. Decl.
Nom.	<i>tota Ijovina</i>	<i>poplus (populus)</i>	<i>nome</i> { <i>nomen</i> (<i>nâma</i> Sanscrit.)
Gen.	<i>tota-r Ijovina-r</i>	<i>pople-r</i>	<i>ocre-r nomne-r</i>
Dat.	<i>tote Ijovine</i>	<i>pople</i>	<i>ocre nomne</i>
Accus.	<i>totam Ijovinam</i>	<i>poplom</i>	<i>ocrem nome</i>
Abl.	<i>tota Ijovina</i>	<i>poplu</i>	<i>ocri nomne.</i>

As an example, we may take the following prayers: 1st, to one god: *fu-tu pacer, pase tua, pople totar Ijovinar, tote Ijovine*; 2nd, to three gods: *fu-tuto foner, pacrer pase vestra, pople totar Ijovinar, tote Ijovine*. The verbs *fu-tu*, *fu-tuto*, are the imperatives singular and plural of the root $\phi\nu$ -, Sanscrit *bhu*-, found in *fui*, &c.; they are related as *es-to* is to *es-tote*. *Pacer* is the adjective, corresponding to the root *pac*- (*pax*, *pacis*), as *acer* corresponds to *ac*-, and *pacr-er* is its nominative plural. *Pase* is the alative of *pax*, for *pace*, by a softening of the guttural, similar to that which we have remarked in the Sanscrit *âçu* for *âkûs*, &c. We have a similar change in the Eugubine tables themselves; thus, we have (*Tab. VI. l. 31*), *sal-vam ceri-tu totam Ijovinam*, “make safe the whole tribe *Igurina*,” where *ceri-tu* is obviously the imperative of a verb corresponding to the Sanscrit root *krî* “to make”, found in the Latin *cere-monia*, and *car-men* (*ποίημα*), Sanscrit *kar-man* “a deed”; but in other places it is written *seri-tu*. *Foner* is the plural of *fons*, which is perhaps a form of *bonus* = *dvönus* (compare *buf*, *bubus*, *trifo*, *tribus*, &c.). And thus the first prayer means “mayst thou be peaceful with thy peace to the people of the whole tribe of Iguvium, to the whole tribe itself;” and the second, “may ye be gracious and peaceful, &c.” This genitive *-r* passed through *-s* (above, p. 112) into the *-i* of the first and second declensions (above, p. 319); and as these genitives were used as locatives by the Romans, there is no reason why the original genitive, from which they were derived, should not be

used in a similar manner. The vowel *u*, which, in the third person singular and the first and third plural, appears before the termination, is, we conceive, that short *ü*, which, as we have mentioned, appears to be lighter than *i* in Latin (above, p. 302). The first person singular has suffered a contraction similar to that which we have pointed out in the Sanscrit: *amor* stands for *amömër*, as *bharé* does for *bharamé*. The first person plural is also contracted (*amamur* stands for *amamuser*), but not to so great an extent. The second and third persons of the Latin passive are exceptions. The former, which ends in *-ris* or *-re*, is thought by Pott and Bopp to be reducible to the analogy of the other persons, according to the theory which they have adopted regarding their formation. Thus Pott says (*Etym. Forsch.* I. p. 135) that *ama-ri-s* is equivalent to *amas se*, the final *s* being the reflexive pronoun, and the *ri* being the usual alteration of the complete second person-ending *-si*. Bopp (*Vergl. Gramm.* p. 688) doubts whether to adopt this view, or to suppose that there is a metathesis of the ending, so that *amaris* stands for *amasir*. There are several objections to this mode of considering the subject, even though we should suppose that the final *r* of the imaginary *amasir* could be taken as the sign of the genitive or locative case, which would leave the vowel *i* unexplained. In the first place, this hypothesis creates a difficulty in the case of the ending *-re*, which is found consistently in the imperative and generally in the oblique moods and tenses, even in the best writers, for, if this *-re* is merely the mark of the second person, the second persons in question are all active forms. Again, it will be recollected, that in the active voice of the Greek and Latin verb the second person of the imperative differs from the others, in the absence of any sign of person, not in the want of any other characteristic. Thus, we have *τύπτε*, *ama*, &c. The principle is the same as that which has occasioned an omission of the nominative sign in the vocative case (above, p. 326). Analogy would, therefore, favour the supposition that the *-s*, which is omitted in *amare*, is the sign of the second person, and not a mark of the passive voice. The word *amare*, which remains, is identical with the infinitive active. Now the infinitive and imperative have other points of resemblance in regard to form, as we shall see in a future chapter; thus *τύψαι* second person singular first aorist imperative middle seems to be the same word as *τύψαι* first aorist

infinitive active; it is also well known to every reader of Greek, that the infinitive is often used for the imperative. The Latin infinitive in *-re* corresponds, as we shall show more at length hereafter, to the Æolic infinitive in $-\iota\sigma = \sigma\iota$; they are both verbals formed with the second pronominal suffix, and used in the locative case. We shall also endeavour to prove that a passive verbal is generally used to form the active infinitive. Now the difference between *amare* and *amarier* is only of the case: the more common form of the latter word is *amari*, in which even this difference is neglected, for the *i* belongs to the verbal in $-\text{ris} = -\text{sis}$, as appears from the forms *amaris*, γέλαῖς. All things considered, it appears to be far from improbable that the second person passive, *amare*, is this verbal which is also used for the infinitive, and that *amaris* was formed, by an addition of the characteristic of the second person, on a mistaken analogy. We might suppose that the second person plural of the Latin passive verb, which ends in *-mini*, bore a similar relation to the Greek infinitive in $-\mu\epsilon\nu\alpha\iota$, and indeed this has been suggested by Gräfe (*das Sanskrit Verbum*, p. 120). That this, however, is not the case, but that the second person plural is a participle in the nominative case with the copula suppressed, formed indeed by the same pronominal suffix as the Greek infinitive referred to, but not used like it in the locative, appears from the following considerations, which were first brought forward by Bopp (*Annals of Oriental Lit.* I. p. 51. *Vergl. Gramm.* p. 689). It is clear that the Latins had a passive participle in *-minus*: we find it rather shortened in *alu-mnus*, *Vertu-mnus* (comp. κρήδεμνον, &c.); and at full length in *ter-minus*, *fe-mina*, and *ge-mini* for *genimini*. In the imperative it is written *-minor*, as in *amaminor*. Now the sign of the plural nominative in the old Umbrian is *-r*; thus we have in the Eugubine tables *subator*, *screhitor* for *subacti*, *scripti*, corresponding to a singular form in *o*, as *orto*, *subato* for *ortus*, *subactus*; and, what is still more to the point, the Latins had a singular imperative in *-mino*; thus *famino* is quoted from Festus, *præfamino* from Cato, and in an inscription, published by Gruter, we have, *is eum agrum nei habeto nei fruimino*, where the participle in *-mino* is clearly used for the third person singular. There need be no confusion between the *r* of *-minor* and that which marks the other persons of the passive voice. As *r* is the mark of both genitive singular and nominative plural in

the Umbrian, so its substitute *-s* designated both of the same cases in old Latin, and its vocalization *-i* again the same two cases in the more modern state of the language. Nor need we be surprised that the termination is fixed, and does not change according to the gender of the substantive; for when the use of this participle without the verb *estis* became fixed and regular, the gender of course would not change: if it did it would be unnecessary to investigate the form at all, since it would then stand on the same footing with the Greek use of the participle for the third person of the perfect passive, *τετυμμένοι εἰσὶ* being the regular form: it seems possible that, with the proper change of gender, a participle in *-μενος* may stand without a finite verb in Greek; at least in all the best MSS. we have *σπευδόμεναι δ' ἀφελεῖν τινὰ τᾷσδε μερίμνας* in *Æschyl. Eumen.* 340. The best syntactical analogy for this explanation of the second person plural passive is one which Bopp has pointed out in the Sanscrit language. There is a periphrastic future in that language, the third person, singular dual and plural, of which appears to be nothing else than the nominative masculine of a participle having a future sense and formed by the suffix *trī*. In the nominative case singular of this participle the *r* is left out and a long *ā* substituted for it, as in *dâtā* “about to give” (*daturus*); but the nominative of the dual and plural are *dâtārau*, *dâtāras*. The first and second persons of this future are expressed by a combination of this participle with the verb substantive, as will appear from the following scheme:

	Sing.	Dual.	Plur.
1.	<i>Dâtāsmi</i>	<i>Dâtāsvas</i>	<i>Dâtāsmas</i>
2.	<i>Dâtāsi</i>	<i>Dâtāsthas</i>	<i>Dâtāstha</i>
3.	<i>Dâtā</i>	<i>Dâtārau</i>	<i>Dâtāras.</i>

In the first and second persons the participle and verb are sometimes separated by the intervention of other words, as in *kartā tad a smi té* “I will do this for you,”—*facturus hoc sum tibi* (*Mahā-Bhārata*); *katham trātā parasutān asi?* “why are you going to preserve the sons of another?”—*cur servaturus alius filios es?* (*Rāmāyana*). The suggestion of Ewald, in his review of Gräfe (*Zeitschrift für die Kunde des Morgenlandes* for 1837, p. 110 foll.), that *-mini* is a corruption of the Sanscrit *-dhvām* does not merit any serious attention.

SECONDARY FORMS.

The secondary forms of the person-endings are generally shorter varieties of the primary forms: this is caused, as we have already hinted, by the augmented length of the verb in the historical tenses. The first person singular is marked by *-ν*, a representative of *-μ* or *-μι*. The same substitution takes place in the Frankish language in the present tense: thus we have *machon* "I make," *machos* "thou makest," *machot* "he makes" and "ye make," but *machomes* and *machont* for the first and third persons plural. We find the same letter standing for *-τι* in the third person singular, and for *-ντι* in the third person plural. It appears, indeed, to be the regular abbreviation of the third person plural, for, though we have beside it a longer form in *-σαν* as the termination of the third person in some of the historical tenses both active and passive, we consider this as a much less genuine suffix. Eminent philologists (Buttmann *Ausführl. Sprl.* § 107. *Anm.* 7 note; Bopp. *Annals of Oriental Literat.* p. 60) regard this *-σαν* as the third person plural of the verb substantive, an opinion from which we entirely dissent, for the following reason. Those tenses in which this ending occurs do not offer any trace of a periphrastic formation in the other persons. Let us take a simple instance. The imperfect of *τίθημι* runs thus in the active and passive:

Active.	Passive.
ἐτίθη-ν(= μ)	ἐτιθέ-μην
ἐτίθη-ς	ἐτίθε-σο
ἐτίθη-(τ)	ἐτίθε-το
ἐτίθε-τον	ἐτιθέ-μεθον
ἐτιθέ-την	ἐτίθε-σθον
	ἐτιθέ-σθην
ἐτίθε-μεν	ἐτιθέ-μεθα
ἐτίθε-τε	ἐτίθε-σθε
ἐτίθε-σαν	ἐτίθε-ντο.

Now if we compare these two forms with any common form of the imperative indicative, *ἐτυπτον*, for example, we shall find that they correspond exactly except in the third person plural. We can hardly believe, therefore, that when such a perfect correspondence exists in every other person, both active and passive, the

third person plural of the active alone should be really different in nature and origin. In the analogies for such a variation, for instance, the third person plural of the perfect passive *τετυμμένοι εἰσί*, the third person of the Sanscrit periphrastic future, and the second plural of the Latin passive verb, mentioned above, we have clear indications of a participle, which in the two last cases, appears alone, but in the case under consideration, the first part of *ἐτίθε-σαν* for instance bears no resemblance to any participle which could be joined with the substantive verb to form a person of *ἐτίθην*. Accordingly we must seek to show rather that the origin of the plural endings *ἔτυπτο-ν*, *ἐτίθε-σαν* are the same, than that they are different. And this we think possible. If we compare the common ending of the third person plural in the present tense, namely *-σι(ν)*, with the old one in *-ντι*, we observe the following facts. In the present tense a compensation has been made for the loss of the *-ν* in the original ending, and *τύπτουσι* stands for *τύπτονθι*, and ultimately for *τύπτοντι*. The *ν ἐφελκυστικὸν* which is found at the end of this termination, when the following word begins with a vowel, may have owed its origin to an indistinct feeling that the *n* included in the diphthong before the ending was still wanting, or from a mistaken analogy: that, however, it was not essential is shown by the fact that it never appears before a consonant. Now in this termination *-σαν* the *ν* is never omitted; and why? because the original *n* of the termination has actually dropped out before the *σ*. On the whole, we have no hesitation in pronouncing that, as *τύπτουσι* stands for *τύπτοντι*, and *ἔτυπτον* for *ἐτύπτοντι*, so *ἐτίθεσαν* stands for *ἐτιθέ-τατι* or *ἐτίθε-ντι*. The analogy of the Sanscrit language fully supports this view: for while we have *abhâ-n* fully answering to the old *ἔφα-ν*, more recent *ἔφα-σαν*, we have also *adu-s* corresponding to *ἔδο-σαν*; in the former case the *-n* of the suffix *-nt* is alone retained, in the latter *t* is preserved and softened into *s*, which is the case in the Greek form we are considering; the *n* being, however, subjoined. This ending is appended to the third person singular of the imperative to form the third person plural, but we must reserve for the next chapter the discussion of the peculiarities of this mood.

We have thus seen that in the active voice, the secondary forms, when they differ from the primary, are generally corrupted

and mutilated. The contrary is the case in the first person singular of the secondary form passive, which is written *-μην* instead of *-μαι*. Of the other person-endings, the first and second dual and plural do not differ from the primary passive forms. The third dual is, as we have mentioned, *-σθην* instead of *-σθον*. The second and third singular and the third plural differ from the primary passive forms by being written *-σο*, *-το*, *-ντο*, instead of *-σαι*, *-ται*, *-νται*. The second person singular is generally subjected to a contraction similar to that of the primary form; namely, as *τύπτε-σαι* becomes *τύπτῃ* or *τύπτει*, so *ἐτύπτε-σο* and *ἐτύψα-σο* become *ἐτύπτου* and *ἐτύψω*.

It has been mentioned that Bopp and Kuhn consider the passive forms as reduplications, namely *-μαι* for *-μαμι* or *μāμā*, and so on. The latter sees a confirmation of this view in the secondary form *-μην*, which he thinks stands for *μημ* or *μāμ*. Besides the general error as to the meaning of the person-endings presupposed in this opinion (and which we have before pointed out), it is not consistent with what we know of the forms of the pronominal elements still existing in the Greek language. We repeat that these personal suffixes imply case-endings, and must be treated accordingly. Now we have in the remaining pronominal elements, which have still an independent existence as particles, forms analogous to all the person-endings of the verbs, and these particles cannot be explained as reduplications; why then should we attempt such an explanation in the other case? The third pronominal root furnishes us with the following analogies to the person-endings: *τοι* (corresponding to the third person singular active); *το* (corresponding to the third person singular passive, secondary form); *τε* for *τε-ν*, comp. *κε*, *κεν*, &c. (corresponding to the second person plural active for *τε-ν* or *τε-ς*). The first, the following: *μοι*=*μῖ* (corresponding to the first person singular active); *μη*=*μαι* comp. *δή*, *δαί*, &c. (corresponding to the first person singular passive); *μέν* (corresponding to the first person plural active, though the final letter is of different origin); *μήν* (corresponding to the first person singular passive, secondary form). For the change of *σαι*, *ται*, into *σο*, *το*, we may compare *π-ρὸ* with *παραί*, *ὑπὸ* with *ὑπαί*, &c.

The following table will enable the student to estimate at one view the difference between the primary and secondary forms of the person-endings in the two voices.

ACTIVE.

SINGULAR.

	1.	2.	3.
Primary form.	-μι.	-σι, -θα, -ις.	-τι, -σι, -ι.
Secondary form.	-ν.	-ς, -θα.	-ν.

DUAL.

	1.	2.	3.
Primary form.	—	-τον.	-τον.
Secondary form.	—	-τον.	-την.

PLURAL.

	1.	2.	3.
Primary form.	-μες, -μεν.	-τε.	-ντι, -νθι, - ^ν _ν σι(ν).
Secondary form.	-μες, -μεν.	-τε.	-ν, -σαν.

PASSIVE.

SINGULAR.

	1.	2.	3.
Primary form.	-μαι.	-σαι, -η, -ει.	-ται.
Secondary form.	-μην.	-σο, -ου, -ω.	-το.

DUAL.

	1.	2.	3.
Primary form.	-μεθον.	-σθον.	-σθον.
Secondary form.	-μεθον.	-σθον.	-σθην.

PLURAL.

	1.	2.	3.
Primary form.	-μεθα.	-σθε.	-νται, -αται.
Secondary form.	-μεθα.	-σθε.	-ντο, -ατο.

We cannot leave the subject of the person-suffixes without making a few remarks on an interesting phenomenon which Bopp was the first to explain satisfactorily, and which he calls the "influence of the weight of the person-endings". Every

student of Greek grammar must have remarked, that though the existing verbs in $-\mu\iota$ are all formed from roots ending in a vowel or $-\nu\nu$, which is regularly lengthened when joined to the person-endings, yet this is the case only in the singular of the active voice. The explanation of the phenomenon is as follows. In the process of abbreviation, always going on in languages which admit of indefinite composition, there is a war between the body of the word and its appendages; and when these latter become very weighty, the curtailment falls upon the body of the word. Now all the dual or plural person-endings are duplicates of the singular, and, therefore, twice as heavy, and the passive endings are, as we have seen, necessarily fuller than the active. Accordingly, to keep up the equilibrium of the verb, it was necessary that the root should be left in its simple form in those persons where a heavier system of terminations was adopted. In the third person plural active the long syllable is retained, but, as we have shown, by a sacrifice of part of the termination. For the rest, we may repeat, what we have said before, that a principle of equilibrium or compensation is observed throughout the Greek language, so that this "influence of the weight of the person-endings" is not a new or isolated phenomenon, but a good example of the general rule.

CHAPTER II.

THE TENSES.

It is difficult to discuss the various questions connected with the developement of the tenses in Greek, without including some topics, which properly belong to an inquiry into the origin and meaning of the modal-inflexions, because, as we shall soon see, the inflexions of tense and mood are in fact identical. In the progressive analysis, however, of the verbs, it is customary to consider the expression of the relations of time immediately after those of number and person and distinct from those of modality, and since these must be considered as subject to some sort of modality, to treat of them in the first instance as they appear in the indicative mood, in that mood which is always used in the *oratio directa* when nothing beyond assertion is intended. For form's sake, we shall abide by the old method.

The tense-system of the Greek verb is wonderfully comprehensive; in number of tenses it far exceeds the Latin, and in the definiteness of their significations it leaves the Sanscrit a long way behind. The proper and most general division of the Greek inflexions of tense and mood, is into definite and indefinite forms. In accordance, however, with the old system, we will first discuss the tenses according to the three great divisions, according as they signify present, past, or future time. Of these divisions, we must omit the present tense: the variations of that tense are not variations of tense, but of conjugation; the mode of forming it belongs, therefore, to a future chapter.

It will, perhaps, be proper that we should in the first place make a few remarks on the theory of Bopp, according to which some of the past and future tenses are formed by agglutination, or composition with the substantive verb. Thus he thinks (*Annals of Oriental Literature*, p. 45) that $\epsilon\sigma\omega$ middle $\epsilon\sigma\sigma\omicron\mu\alpha\iota$, is properly the characteristic of the future tense, and that this is merely the present tense of the substantive verb $\epsilon\sigma$ provided with $-\omega$ for the termination, to which the usage of language has

given a future signification. He even goes so far as to assume that *ἔσομαι* may be an abbreviation of *ἔσέσμαι*, and (p. 61) that *εἶησαν* is a compound of *εἶη* and *σαντι*! He thinks there is an analogy for this in the Sanscrit future characteristic *-syâmi*. "It may be supposed," he says (p. 47), "that the root *As* would have had a future tense originally, and it seems to me credible that *syâmi* is this future tense, being lost by lapse of time in disconnected use, and being found at present extant only compounded with attributive roots." In the same way he considers the 1st aorist, as it is called (*ἔτυπ-σα*, &c.), as a compound of the root of the attributive verb with the first preterite of the substantive verb, and similarly analyzes *fu-erunt* for *fuesunt*, *fu-erim* for *fuesim*, *fac-sim*, &c. As an analogy in favour of his general view, he adduces the Provençal compound futures, *aurai* for *aver ai*, &c. (p. 46). But these are widely different formations from those which he imagines in Sanscrit and Greek. The two parts of the compound are both existing words and may be written separately, as indeed appears from the instances which he quotes from Sainte-Palaye: *compatar vos ai* for *je vous compterai*; *dar vos n' ai* for *je vous en donnerai*; *dir vos ai* for *je vous dirai*; *dir vos em* for *nous vous dirons*; *gitar m'etz* for *vous me jeterez*. Whereas his supposed compounds are made up of a root, which of course cannot exist separately, and of a termination which never does appear as a distinct word; for there is no such verb as *ἔσω* in Greek, and *syâmi* is equally imaginary. There are instances of compound tenses in Sanscrit; namely, the future of which we have already spoken and which is formed of a participle and the full verb *asmi*, and a preterite formed of an abstract substantive in *â*, used only in the accusative *âm*, and corresponding to an infinitive in Zend, and one of the three verbs *âsa* "I was", *babhûva* "I have been", and *chakâra* "I have made": thus from the root *îç* "to rule", we have the abstract substantive *îçâ*, accusative *îçâm*, and by composition with the perfects of *as-*, *bhû-*, and *krî-*, are formed the perfects *îçâm-âsa*, *îçâm-babhûva*, and *îçân-chakâra*, all signifying "I ruled" (Bopp, *Krit. Gramm.* p. 229). These compounds might be divided, as is often the case with the former (above p. 447). There are also instances of auxiliary or periphrastic formations in Greek, of which we shall speak hereafter, but they are all made up of distinctly developed verbs, and therefore furnish no analogy for

the support of Bopp's theory. We have no more right to presume a composition in etymology when the elements never exist separately, than we have to suppose an ellipsis in syntax, when the supposed full form never occurs.

But perhaps a greater objection even than the intrinsic improbability of the agglutination-theory, arises from its contradiction to a mode of developing the tenses natural in itself and supported by every analogy of comparative grammar. In the verb, as well as in the noun, there is a wide distinction between compound words and those which are merely developements of a root by means of pronominal additions. In pointing out the analogy between the verb and the noun, we have mentioned that the person-endings in their modifications correspond to the cases. We must here insist that the differences of tense and mood, and, in some cases, of voice, are expressed by pronominal adjuncts, the same in kind with those which constitute the affixes between the root and case-ending of a noun. There are in fact two ways in which the crude form of a word, whether it be a noun or a verb, may be affected. It may either be affected internally, that is, by reduplication, *guna*, or *anuvâra*, or externally, by means of some prefix or affix. The first method is adopted in the two primary tenses, the present and perfect, as will be shown in the chapter on the conjugations. The second is applied to the formation of all the other moods and tenses, and, in some cases, also to the expression of the passive voice. This external pronominal affection is brought about in two ways; first, by a simple prefix of the demonstrative element *ā*, or *é*, called the augment: secondly, by an affix which is, singularly enough, always some modification of the second pronominal element: it forms aorists and futures under the form *sā*: secondary perfects under the form *kā*, or *hā*; the optative mood under the form *ya*; the passive voice under the form *ya* or *th-ya*; and sometimes two forms of the same element are combined, as in the iterative *s-kā*, the desiderative *s-ya*, and the aorist in *th-ya* just mentioned. We begin with the augment.

In the Greek system of tenses, past time is denoted by a short *é* prefixed to the verb or, apparently, by a reduplication of the first consonant and root vowel, which, however, is generally altered according to certain rules. Buttmann is inclined to consider the latter as the original characteristic of past time, the former being

a mutilation of it (*Ausführl. Sprl.* § 82, 3 note). Even though we had no other objection to offer to this view, we should consider Bopp's argument fatal to it. The historical tenses in the Sanscrit verb are marked by an augment $\check{a}$: the perfect, in the same way as the Greek, by reduplication: but, as Bopp remarks (*Annals of Oriental Literature*, p. 41), "the Sanscrit augment has no connexion at all with the reduplication, because the redoubled consonant is generally articulated by the vowel of the root; *tup* forming *tutup-*, and *liç* *liliç*; now, if the first preterit of these roots were *utôpat*, *ilêçat*, instead of *atôpat*, *alêçat*, then it might be said that there exists some connexion between the reduplication and the augment, when there also would be a mere inflexion, whilst, in its actual state, I consider it as an affix which had its proper signification." There are, however, other reasons for believing that the augment and reduplication are essentially different. Besides the repetition of the initial consonant with ϵ to form a perfect, there is another reduplication frequently found in verbs in $-\mu\iota$, of the initial consonant with a short ι to form the present and imperfect. Thus we have $\tau\acute{\iota}\text{-}\theta\eta\text{-}\mu\iota$ in the present and $\tau\acute{\epsilon}\text{-}\theta\epsilon\iota\text{-}\kappa\alpha$ in the perfect. We believe there is no essential difference between these two prefixes: the difference of tense is expressed by the suffix $-\kappa\alpha$ and the exchange of the root vowel. What the prefix or reduplication means we must now endeavour to find out. The root $\theta\epsilon\text{-}$ might appear in a noun,— $\theta\epsilon\text{-}\omicron\varsigma$ for instance, as well as in the verb $\tau\acute{\iota}\text{-}\theta\eta\text{-}\mu\iota$. In the noun it might imply that the person indicated was "a placer", but in the verb it must convey an idea of an action—"a placing". Now an act necessarily implies a continuance or duration, and what more simple method of expressing this could we desire than by a repetition of the root? and thus we are told that, in the broken English of the Negroes, acts are expressed by repetitions of substantives. Just so we believe it was with the original Greek present tense. The present and imperfect both express a continuance— $\tau\acute{\iota}\theta\eta\mu\iota$ "I am placing", $\epsilon\tau\acute{\iota}\theta\eta\nu$, "I was placing". The perfect expresses the continued state after the act had taken place: it is a mixture of present and past time: it speaks of the person's state or duration as present, of the act as past; $\tau\acute{\epsilon}\text{-}\theta\epsilon\iota\text{-}\kappa\alpha$, "I am in the state of a person who has placed." The distinction between the aorist and these reduplicated tenses consists in this, that the

aorist always speaks of the action as single, as confined to a point of time, and this meaning it retains through all the moods, even the imperative, as Greek scholars have fully shown. Now the aorist never admits of reduplication, even in those verbs in which the present, &c., are reduplicated, except in some cases, when it entirely loses its meaning. Of the origin and signification of the augment we have before spoken (above p. 242). We have seen that Bopp identifies it with the negative $\acute{\alpha}$ -; he considers it as implying a negation of present time, a meaning which Gräfe justly remarks (p. 103, note 57) would do for the future as well as the past. In our opinion it is the pronominal root $\acute{\epsilon}=\acute{\alpha}$ which we find elsewhere, as denoting distance or remoteness. The definiteness of locality presumed by these pronominal roots would render this unsuitable for the expression of future time; in looking back on a past action, we always, in some measure, fix its position, or regard it as fixed, with a subordinate idea of distance,—“that which is gone by;” in looking forward to the future, our anticipations are always indefinite and confused, though perhaps connected in all cases with a sentiment of proximity or approach—the idea of “that which is coming.” The pronominal root, in the former case, is used as a prefix, and the accent is drawn back on it to express that the time referred to is gone by, just as conversely future time is expressed by a suffix. A striking analogy in support of this is found in the Greek prepositions of two syllables, which throw their accent backwards or forwards, according as the noun to which they refer precedes or follows. We observe something very similar in the shifting of the accent in common conversation. It is scarcely necessary to refer to the argument for the difference of the augment and reduplication which is afforded by the augmentation of the reduplicated perfect to form the plusquam-perfectum.

The addition of the letter $-\sigma-$ to the root of the verb, is the commonest method of denoting the future in Greek. This letter, as we have mentioned above, represents the second pronominal element; its use to denote the future is due to the principle just alluded to, that the future, or, as the Germans more correctly call it, *Zukunft*, properly refers to an approximation or “coming.” In certain cases the letter $-\sigma-$ is not immediately joined to the root, but a short vowel ϵ intervenes, just as we have both *liebete* and *liebte* in German, both *charméd* and

charm'd in English, or, to take a still more striking analogy from our own language, just as the *e* is regularly *sounded* in some participles, and as regularly *dropt* in others. Of this common future in $-\sigma\omega$, there are two leading modifications in Greek; they are called by grammarians *the Attic future*, and *the second future*. The distinction between these two futures, which both end in $-\hat{\omega}$ in the Attic dialect, consists in this, that, whereas in the Attic future in $-\epsilon\omega$, $-\hat{\omega}$; $-\alpha\omega$, $-\hat{\omega}$; the ϵ or α belongs to the root,—in the second future the ϵ included in the $\hat{\omega}$ is added to the root: and that in the verbs which form the future in $-\iota\hat{\omega}$ for $-\acute{\iota}\sigma\omega$ the characteristic of the verb is dropt; whereas the second future keeps its characteristic unaltered. The second future is the regular form for verbs ending in λ , μ , ν , ρ . It is to be observed that the Ionians used the uncontracted form in $-\acute{\epsilon}\omega$ instead of the Attic future, and that in Homer we have such futures as $\acute{\epsilon}\rho\acute{\upsilon}\hat{\omega}$, $\tau\alpha\nu\acute{\upsilon}\hat{\omega}$ for $\acute{\epsilon}\rho\acute{\upsilon}\sigma\omega$, $\tau\alpha\nu\acute{\upsilon}\sigma\omega$. In general, we may say of the two shortened futures, that they are abbreviations, the Attic future of a future in $-\sigma\omega$, the second future of a future in $-\acute{\epsilon}-\sigma\omega$, the σ - being omitted as in $\tau\acute{\upsilon}\pi\tau\epsilon\iota$ for $\tau\acute{\upsilon}\pi\tau\epsilon\sigma\alpha\iota$, $\delta\acute{\eta}\mu\omicron\iota\omicron$ for $\delta\eta\mu\acute{\omicron}\sigma\iota\omicron$, &c.

The circumstance most deserving of notice in the future is its connexion with the tense called the aorist. Thus we have, corresponding to the regular future $\tau\acute{\upsilon}\pi-\sigma\omega$, the regular first aorist $\acute{\epsilon}-\tau\upsilon\pi-\sigma\alpha$, actually differing from it only in the augment. In fact, $\acute{\epsilon}\tau\upsilon-\psi\alpha-(\mu)$ stands related to $\tau\acute{\upsilon}\psi\omega = \tau\acute{\upsilon}\psi\omicron\mu\iota$, just as $\acute{\epsilon}\tau\acute{\iota}\theta\epsilon\alpha = \acute{\epsilon}\tau\acute{\iota}\theta\eta\nu$ stands related to $\tau\acute{\iota}\theta\eta\mu\iota$, that is, as imperfect to present. We shall show, in the following chapter, that the same relation subsists between the conjunctive and the optative. The connexion between the future and the aorist was first pointed out and explained by J. L. Burnouf, in his *Méthode pour étudier la langue Grecque*, § 255, from a comparison with the tenses of the French verb. As we think his way of considering the subject very good, and as it has not been sufficiently, if at all, attended to by those who have written on the tenses, we shall give his illustrations as nearly as possible in his own words. He divides the tenses of the Greek verb into two classes, the principal, and the secondary. The principal tenses are, (1) the present, (2) the future, and (3) the perfect. The secondary, (1) the imperfect, (2) the aorist, and (3) the plus-perfect, each

of which is formed from the corresponding primary tense. The following investigation of the French verb *lire* shows the connexion in meaning between the primary and the secondary tenses :—

I. Principal tenses, which express that the action has relation to the time of speaking.

- (1) Present, *Je lis* “I am reading,” i. e. at the present moment.
- (2) Future, *Je lirai* “I shall read,” i. e. at some period succeeding the present moment.
- (3) Perfect, *J’ ai lu* “I have read,” i. e. at some period preceding the present moment.

The whole duration of time is thus divided into three portions, the present, which is fixed, so that if you say, “I am reading,” no one will ask you “when?”—and the future and perfect, which are fixed relatively to the present. For the assertion “I shall read,” or “I have read,” would convey a clear and intelligible idea, even though you should answer, “I do not know,” or “I do not remember,” to the question “when will you read?” or “when have you read?” So that these primary tenses enable us to see at once to which particular point of time, —present, future, or past,—the act relates, and are therefore absolute and independent, and express only *a simple relation* to one of the three points of time.

II. Secondary tenses, which imply a relation to some point of time other than the present.

- (1) Imperfect, *Je lisais* “I was reading.”
- (2) Aorist, *Je lus* “I read.”
- (3) Plus-perfect, *J’ avais lu* “I had read.”

All these assertions suggest the question “when?” and if you would have your hearer understand you, the precise point of time, *when* you were reading, or read, or had read, must be stated. Accordingly, not being determined by themselves, they require some additional statement to fix their meaning; and thus

they express a *double relation* or *two relations*, (1) to the past, generally, and this is determined by the forms themselves; (2) to some fixed point in the past. The primary tenses, therefore, may be called definite (*déterminé*); the secondary, indefinite or half-definite (*indéterminé* or *sémi-déterminé*). The former express only one relation, and this relation is determined by their form, the latter, two relations, of which the form determines only one.

DEFINITE TENSES.

The present	expresses	simultaneity	} relatively to the time of speaking.
The future		posteriority	
The perfect		anteriority	

INDEFINITE TENSES.

The imperfect expresses simultaneity—je lisais *pendant* que vous écriviez.

The aorist expresses posteriority—je lus *après* que vous eûtes fini d'écrire.

The plus-perfect expresses anteriority—j' avais lus *avant* que vous eussiez écrit.

Now all these tenses express *anteriority* alone, in regard to the time of speaking. The relation, in which they differ from one another, is the only one expressed by the definite tenses. It is, therefore, by a natural analogy that, in the Greek language, the imperfect is derived from the present, the aorist from the future, and plus-perfect from the perfect, by prefixing the augment, which is the mark of past-time, to these tenses, which in themselves denote simultaneity, posteriority, and anteriority.

This view of the case will contribute materially to the better understanding of the whole system of moods and tenses in Greek. We have seen, from what Burnouf says, that all three of the tenses which express a double relation may be called *ἀόριστοι*, or indefinite. But the second of them, which is formed from the future, is peculiarly so, from the mixture of past and future time implied in it, and therefore the Greek grammarians have particularly distinguished it by this name. Thus we find it used in cases where we should expect one of the other indefinite tenses, though never, we believe, for a definite tense. In the passage quoted from Xenophon by Burnouf (§ 357) as an in-

stance of its use for the perfect, it is used in the proper aorist sense, or with a reference of posteriority to a fixed point of time, *τοὺς θησαύρους τῶν πάλαι σοφῶν, οὓς ἐκεῖνοι κατέλιπον ἐν τοῖς βιβλίοις γράψαντες, σὺν τοῖς φίλοις διέρχομαι*, i. e. they first wrote them down, and then left them. When the aorist expresses repetition or continuance, and thus seems to approximate to the present, it always has reference to some fixed point or circumstance, which is necessary to define it. In the same way, the optative, which is the aorist of an old future, is used to express repetitions. When deprived of its augment, as in the infinitive mood, the aorist may be used for the future after *μέλλω* (see Porson *ad Eurip. Orest.* 929). The Greeks were fond of describing historical events in the present tense. Similarly, we sometimes find the imperfect in a narrative, where we should expect the aorist, especially in Homer and Herodotus, the narrator representing the action as if he had been present at the time when it was going on (see Matth. *Gr. Gr.* § 505). The same feeling gave rise to the employment of the imperfect, in the old *ἀναγραφαὶ* and in Pindar, in describing a victory gained at the public games (see Dissen *ad Pind. Nem.* v. 5).

The second aorist, as it is called, bears precisely the same relation to the second future: thus we have second future *βαλῶ*, second aorist *ἔβαλον*. The former stands for *βαλέω*=*βαλέσω*, the latter for *ἐβάλεον*, as appears from the infinitive *βαλεῖν* (in Ionic *βαλέειν*), and the participle *βαλοῦσα*, Doric *βαλοῖσα*, Ionic *βαλεῦσα*. Such an aorist as *ἔμεινα* is formed on the compensation principle for *ἔμενγα*=*ἐμένεσα*. It will be recollected, that although we retain the names first future, first aorist, second future, second aorist, we do not mean that each verb was provided with such an apparatus of longer and shorter forms. Some would have the more complete tense only; others, only the contracted one; and in the same verb, certain writers would adopt the former, while others would prefer the latter. The opinion of Herodian (*Bekker. Anecd.* p. 1290), an opinion adopted by many modern scholars (*Philol. Mus.* II. p. 205), that there is no such thing as a second future, is only so far true as this—the second future is not a distinct tense, for it is only a contraction, but there are such contracted futures, indeed they are the regular form for verbs the roots of which terminate with a liquid; and we might go so far as to say, that every tense of the subjunc-

tive mood is an instance of the shortened future, to which the corresponding tense of the optative stands in the relation of aorist. Instead, therefore, of expunging the second future from every grammar, it would be much better if the opposition of future and aorist, or generally of the definite tense to the indefinite, were marked throughout the paradigm, in which case we should have not merely two futures but half a dozen. The second aorist, as we shall see in the chapter on the conjugations, is that which presents the root of the verb in its simplest form, for as the suffix has vanished, there is no reason why a lighter form of the vowel should be introduced, and the pronominal adjuncts employed to form the present tense, would be omitted, as a matter of course, in a secondary tense, which was originally formed by an adjunct.

From the future $\tauύψω$ is formed the desiderative $\tauυψείω$, to which again the form $\tauύψεια$ stands as imperfect; it is generally considered as an optative aorist, and the desire or wish conveyed by it has deprived it of all actual reference to the past, and therefore of its augment. Besides this, the formation of a new present tense from some past or future tense of a verb is one of the commonest phenomena in the Greek language: thus we have from the perfect $\hat{\eta}\kappa\alpha$ the new present $\acute{\eta}\kappa\omega$, and from the perfect $\tauέθνηκα$ the new present $\tauεθνήκω$, &c.

The Greek grammarians acknowledge a first and second perfect as well as a first and second aorist. The first perfect is thus distinguished. When the final letter of the root of the verb is β , π , ϕ , or γ , κ , χ , this consonant either becomes aspirated or remains so. In all other cases the characteristic of the first perfect is $-\kappa\alpha$. The second perfect, though it occasionally admits of alterations of the root, principally by *guna*, adds nothing but $-α$, $-ας$, $-ε$, as a termination. Some scholars think that the second perfect must be considered as older and more organic than that called the first, as it is formed out of the resources of the root itself without foreign additions, and corresponds exactly to the proper perfects in Latin and Sanscrit, and to the perfects of the first six of the strong conjugations in old Low German. We entertain very strong doubts as to the truth of this assertion. The second perfect must be a mutilated form, for the past time implied in this tense could not be conveyed by the reduplication alone. When we compare the

aorists ἔθηκα, ἔδωκα, with the perfects τέθεικα, δέδωκα, we perceive the only real difference to be that the aorists have augments, the perfects reduplication. And if we take the perfects $\left\{ \begin{array}{l} \text{τέτυφα,} \\ \text{τέτυπ-ha} \end{array} \right\}$

$\left\{ \begin{array}{l} \text{λέλεχα} \\ \text{λελεγ-ha} \end{array} \right\}$ we see that the termination is simply *ha*. That the Sanscrit *ç* in most cases represents a Greek *κ* we have already seen; it has also been shown how the soft sound of *s* is often substituted for the hard *κ*. Of the substitution of *h* both for *k* and *s* it is unnecessary to speak. It appears then probable, from observation in the Greek language alone, that the terminations of the perfect and aorist are identical. The analogy of the Latin language renders this all but certain. The Latin conjugation is exceedingly incomplete. There are no means of expressing past time by augmentation, and very few verbs have a proper reduplicate perfect, as *tetuli* from *tollo*, *pepuli* from *pello*, *cecidi* from *cado*. In some the syllable of reduplication is completely lost as in *fīdi* from *findo*, in others, the length of the penultima is all that remains of the original form of the perfect, as in *lēgi* from *lēgo*, &c. In some cases we have still both forms: thus, we have both *tetūli* and *tūli*, both *tūtūdi* and *tūdi*. All these perfects, however, may properly be so called: they are all equivalents, more or less mutilated indeed, to the Greek second perfect, in which the characteristic termination is dropt. Another perfect so called ends in *-si*, which is never reduplicated and therefore seems more entitled to the name of first aorist. The flexion, however, is that of the other perfects (*-i*, *-isti*, *-it*, *-imus*, *-istis*, *-ērunt*), and we must, therefore, be content to say that this form of the perfect has lost its reduplication, just as the past tense in Latin has always lost its augment. Corresponding to this aorist or perfect we have a future in *-sim* as *faxim* (*fac-sim*). The old infinitive forms like *surrexe* are, as Gräfe has remarked (p. 108), very like Greek aorist-infinitives such as ῥῆξαι. The want of the augment, however, and the absence of regular futures corresponding, prevent us from admitting at once the claim of the perfect in *-si* to be considered as a first aorist. The relation between the so-called imperfect and the future in *-bo* is precisely that of first future and first aorist, only that the Latin aorist has no augment: compare *amabo*, *amabam* with τύψω, ἔ-τυψα-μ. This future in

-bo does not occur in common Latin, except in verbs which fall under the two first conjugations in *-ao*, *-eo*: but the authority of the old grammarians and the analogy of the so-called imperfects lead us to conclude that it must at one time have been universally in use. The form in *-am*, *-es*, *-et*, &c., generally used for it in the third and fourth conjugations, appears to be nothing but an optative or conjunctive. By the side of the imperfect in *-bam* and future in *-bo* we find a perfect in *-vi*. The *b* in the two former and the *v* in the latter are representatives of the second pronominal element. The substitution of *u* or *v* for *b*, and *vice versa*, was very common in Latin; compare *aufero* for *abfero*, &c. Moreover, we find in the Umbrian monuments *trif* for *tribus*, *fons* for *bonus*, *buf* for *bubus*, and in Lucilius Afranius *ifont* for *ibunt*. The last is very much to the point, and connected with the *erafont* in the Eugubine tables for the improper future *erunt* = *esunt*, which is merely the present, renders it probable that *amabam*, *amabo*, were originally written *amavam* and *amavo*. In modern Italian the converse has taken place, and *amabam* is written *amava*. On the whole, then, we may fairly conclude that the suffix of the future, aorist, and perfect, as well in Greek as in Latin, is the same, being always some representative of the second pronoun. The Greek distinguishes the aorist and perfect from the future by augment or reduplication; in Latin the proper distinction has been lost, the only differences which remain being accidental and not essential.

This view of the case takes away all remaining difficulty from the whole subject of the moods and tenses in the active voice. It explains such futures as $\tauανύω$ for $\tauανύ\tilde{F}\omega = \tauανύ\tilde{\beta}\omega = \tauανύ\sigma\omega$, &c., and $\betaείομαι$ for $\betaί\tilde{F}\tilde{F}\omicron\mu\alpha\iota = \betaί\tilde{F}\sigma\omicron\mu\alpha\iota$ (root $\beta\iota\tilde{F}$ Latin *viv-o*, *viv-si* = *vixi*); such aorists as $\acute{\epsilon}\chiε\upsilon\alpha$ or $\acute{\epsilon}\chi\epsilon\alpha$ for $\acute{\epsilon}\chi\epsilon\tilde{F}\tilde{F}\alpha = \acute{\epsilon}\chi\epsilon\tilde{F}\sigma\alpha$ (root $\chi\epsilon\tilde{F}$); such forms as *negassim*, *prohibessit*, for *negasesim* = *negaverim*, and *prohibesesit* = *prohibeverit* (= *prohibuerit*, comp. *monui* with *monebo*). It also shows, how the Latins, after they had lost their augment, expressed all the modifications of past time by termination, namely, by repeating this termination *-si*. Thus *amavi* = *ama-s-i* is thrown farther back into past time by the repetition of the ending, the plusquamperfectum being *amaveram* = *amasesam* (comp. *amassem*

for *amavissem* = *amasissem* = *amasisesim* by triple repetition of the ending). The past future is *amaverim* = *amasesim* from *amabo* = $\begin{cases} amavo \\ amaso \end{cases}$. It is possible that something akin to this has taken place in the Greek plusquamperfectum *ἐτετύφεα* for *ἐτετύφεα* = *ἐ-τε-τύπ-ῃεα* = *ἐ-τε-τύπ-σεα* from *τέ-τυφα* = *τέ-τυπ* $\begin{pmatrix} h \\ \sigma \end{pmatrix}$ *α*. It is observed, that in the imperfect *ἐτίθεα* for *ἐτίθην* the final *-α* is a substitute for the *-ν*. In the other persons we generally find *ἐτίθης*, *ἐτίθη*. It is true that *ἐτίθεες* *ἐτίθεε* are implied in the Attic forms *ἐτίθεις*, *ἐτίθει*: the explanation of which is, that the root is *θε-*, the other *ε* being the *guna* vowel. Now in the plusquamperfectum we find not only *ἐτετύφεα*, *ἐτετύφεε*, but the other persons also end in *-εας*, *-εαμεν*, *-εατε*, *-εαν*; so that *ἐτετύφεα* stands for *ἐτετύφειν* or *ἐτετύφεαν*, and not for *ἐτετύφα-ν*, for then the *ε* would be inexplicable. This appears also from the form *-εια* for *-ειν* which is found in inscriptions. It may seem that the same suffix indicates both future and past time: but this is not exactly the case. In the formation of the aorist from the future, it was intended to express posteriority in relation to some past event (above, p. 460), and we observe that this suffix is never used by itself to signify past time in Greek; this is always done by the augment. The want of an augment in Latin and the gradual loss of a proper future by the substitution for it of a conjunctive, gave this termination the improper force which it has in that language.

The form which some of the tenses present in the Greek passive has occasioned difficulties which no philologer has hitherto been able to surmount. We conceive that the general principles which we have laid down at the beginning of this chapter will afford a satisfactory explanation of these troublesome phenomena. It has been mentioned, that in Sanscrit there are two forms of verbs, considered according to their person-endings; the one is called *parasmaipadam*, or transitive, and has endings in the instrumental case; the other, called *atmanêpadam*, is middle or deponent, and has endings in the locative case. The passive voice is formed from the *atmanêpadam*, by inserting the pronominal syllable *ya* between the root and the ending. Now we find that, in Greek, the present tense of the *atmanêpadam* is used as a passive and also as a middle, and the passive

forms of the other tenses generally bear the same relation to the active forms that we find in the present passive or middle, as compared with the same tense in the active; the difference, namely, is only in the ending. In the perfect and plusquamperfectum the characteristic σ , κ , or h is frequently dropt altogether, as we have seen in the case of the second perfect and second aorist. With the aorist, however, it is quite different. The form $\epsilon\tau\upsilon\psi\acute{\alpha}\mu\eta\nu$ from $\epsilon\tau\upsilon\psi\alpha-(\mu)$, which we should expect as the passive aorist, never bears a passive signification. It is appropriated to the middle or reflexive voice. The forms actually used as passives, $\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$, $\epsilon\tau\acute{\upsilon}\pi\eta\nu$, &c., have the active person-suffixes throughout all the moods, and philologists are quite at a loss to determine whence they have got their uniformly passive signification. Bopp (*Berlin Jahrb.* 1827, p. 284 foll.; *Vocalismus*, p. 53 foll.) has suggested two methods of explaining the former. He conjectures that it is either formed of the verbal adjective and the substantive verb ($\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$ for $\tau\upsilon\pi\tau\acute{o}\varsigma \hat{\eta}\nu$), or by an addition to the root of the aorist $\epsilon\theta\eta\nu$, on the supposed analogy of the Gothic *sókidédum*, "seek-did-we", and the Latin *vendo*. Pott (*Etymol. Forsch.* I. p. 47) prefers the former of these explanations; Kuhn (*de Conjugatione in -μι*, p. 67) is inclined to adopt the latter. On a former occasion (*Annals of Oriental Literature*, p. 39) Bopp proposed a different conjecture, which shows to what extremities despairing ingenuity may be driven. He supposes that $\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$, $\epsilon\delta\acute{o}\theta\eta\nu$, &c., may proceed from the passive participles $\tau\upsilon\phi\theta\epsilon\acute{\iota}\varsigma$, $\delta\omicron\theta\epsilon\acute{\iota}\varsigma$, substituting for the termination $\epsilon\acute{\iota}\varsigma$ the person-terminations $\eta\nu$, $\eta\varsigma$, η , &c. But how does the syllable $\tau\upsilon\phi\theta\epsilon\acute{\iota}\varsigma$, with the active participial ending, come to be a passive participle? And how does it happen that $\tau\upsilon\phi\theta\epsilon\acute{\iota}\varsigma$ is explicable, and $\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$ not? In fact, this explanation tells us nothing: he might just as well have said that $\epsilon\theta\eta\nu$ was formed from $\theta\epsilon\acute{\iota}\varsigma$, by the substitution of $\eta\nu$ for $\epsilon\acute{\iota}\varsigma$! Perhaps, however, Gräfe's remark (p. 114) is even more absurd than any of these. He says that $\epsilon\tau\upsilon\pi\omicron\nu$ is an imperfect of the ω conjugation, $\epsilon\tau\acute{\upsilon}\pi\eta\nu$ of the conjugation in $-\mu\iota$, as if the distinction between the conjugations in $-\omega$ and $-\mu\iota$ could in any sense correspond to a difference of voice!

It appears to us that these aorists are formed like the Sanscrit passive, by the insertion of the cognate pronominal elements *ya* and *tha*; the same aversion to superfluous inflexion,

which has made the Greeks contented with the mere change of the case of person-endings in the other tenses, has induced them to consider the pronominal insertion alone as sufficient in this instance, with the exception of the corresponding futures, which present the *atmanépadam* form. That there is some foreign element in forms like *ἐτύφθην*, every one is constrained to admit at first sight, but no one has attempted to explain *ἐτύπην* otherwise than as a mutilated form of *ἐτύφθην*, except Bopp, who considers it as a compound with the substantive verb *ἦν* (*Vocalismus*, p. 54). This misconception of the second aorist passive has led to some extraordinary classifications in the commonest verbs. To take one of the most obvious instances, the verb *ἵστημι*, root *σταῖ*, which means “I cause to stand”, has a transitive future and aorist *στήσω*, *ἔστησα*, regularly formed from it. Now in every grammar we find in the paradigm of the active voice an aorist and perfect *ἔστην*, *ἔστηκα*, which bear a passive signification (“I stood” or “was caused to stand”) throughout all the moods: whereas *ἐστάθην*, which is a synonym to *ἔστην*, is not placed in the active but in the passive paradigm. It is true that at first sight *ἔστην* seems to correspond to *ἔθην*, &c., but if we compare *στήναι*, *στήθι*, *ἑστημεν*, *στάς*, &c., with *θεῖναι*, *θές*, *ἑθεμεν*, &c., and *ἔστηκα* with *τέθεικα*, we shall be constrained to admit that these are widely different forms, and that the root *σταῖ* has suffered some change in them which has not been experienced by the root *θεῖ* in the others. But *ἐτέθην*, which stands for *ἐθέθην* (one of the aspirates being necessarily abolished, and the second retained in preference to the first, in consequence of the importance of the termination), corresponds to the other aorist *ἐστάθην*; and *ἔστην*, *στήσομαι*; *ἐστάθην*, *σταθήσομαι*; are perfectly analogous to *ἐτύπην*, *τυπήσομαι*; *ἐτύφθην*, *τυφθήσομαι*; so that *τίθημι* must be considered as having lost its second aorist passive, and *ἔστην*, *στήσομαι*, must be placed by the side of *ἐστάθην*, *σταθήσομαι*, in the passive paradigm. We find other instances of a loss of the second aorist, and we must determine from the meaning and the form in the plural and other moods, whether the active or the passive aorist is the one wanting. Thus *ἔδων* is not only active in signification, but we see from the form *ἔδομεν*, *δός*, *δούς*, &c., that the form contains no foreign element; whereas when we find *φύω* (*φύμι*), *φύσω*, *ἔφυσα*, active; but *ἔφυν*,

πέφυκα, passive: δύω, δύσω, ἔδυσσα, active; ἔδυν, δέδυκα, passive: σβέννυμι, σβέσω, active; ἔσβην, passive: βήσω, ἔβησα, active; ἔβην, βέβηκα, passive: &c., and also observe the forms φῦναι, ἔδῡμεν, ἔσβημεν, βῆναι, we conclude that in these cases the root has received some accession, and that the verb has no short form of the active aorist.

Having vindicated the claim of these intransitive aorists in -ην, -υν, to rank with the passive forms in -θην, we must now endeavour to point out the pronominal element which has given them their passive signification. This is, in our opinion, the same which is used to form the passive voice in Sanscrit, namely, the second pronoun, under the relative form *ya*, Greek -ια. It is also used to form other derivative verbs in Sanscrit, such as denominatives and causals. That it was of most extensive application in Greek, we shall see in another chapter. In almost all cases, however, it has been absorbed by one or other of the various euphonical artifices which the fineness of the Greek ear necessitated. Among other instances of this, it may be easily seen, that it lies hid in the derivative verb-endings -αω, -οω, in many of those in -ύω, and also perhaps in some of those in -έω (Bopp, *Vergl. Gramm.* p. 727). A similar absorption has taken place in the optative of verbs in -ύω, -νμι (Buttmann, *Ausf. Sprl.* § 107; *Anm.* 36), and we have seen something of the kind in ἡμερος for δυά-μερος. We consider, then, that ἔστην, ἔφῡν, ἔδῡν, &c., stand for ἐστάγامي, ἐφύγامي, ἐδύγامي, &c., respectively. The Latin language affords us an excellent example of the way in which this pronominal formation can give a passive sense without the addition of an *atmanēpedam* form. It seems that in Latin the contracted verbs in -ao agree in their uses with the Greek in -έω, and those in -eo with the Greek in -άω or -γω. The Greek conjugation in -εω was, as we shall see, that which was always adopted in forming verbs from compound nouns; thus, ἐνεργέτης made ἐνεργέτω, &c. The same was the case with the Latin verbs in -ao: thus from *lætificus* we have *lætificāri*, &c. Again, we find that many active verbs in Latin either uncontracted or contracted in *a*, have a neuter or passive verb from the same root which is uncontracted, or, what is more usual, contracted in *e*. We will take a few instances: 1st, active uncontracted, passive contracted in *e*; active *pendere*, passive *pendere*; active *scandere*, passive *scatere*; active *pandere*, passive *patere*; active

sisto, passive *stāre* (this is perfectly analogous to ἵστημι, ἕστην); active *jacere*, passive *jacēre*; 2nd, active contracted in *a*, passive contracted in *e* or uncontracted; in this case it will be observed, the active verbs are all derivatives from the verbal nouns of the neuter verbs: active *sedāre*, passive *sedēre*; active *parēre*, passive *parēre*; active *liquāre*, passive *liquēre*; active *fugāre*, passive *fugēre*. The same method which the Latin language has applied in the formation of complete verbs has been adopted in Greek for the construction of one tense, and the forms dependent on it.

The aorist in *-θην* is easily explained. It contains the element *θα*, (ἐν-θα, κλῦ-θι) combined, it would seem, with the element which forms the other aorist, namely, *-ια*. We might even say that the form in *ya* was the ultimate state of that in *thya*. That these elements are ultimately identical, we have before seen, but there is nothing more objectionable in their combination, than there is in the composite endings *σ-κ-*, *σ-ya*, in iterative and desiderative forms, which are formed of the same elements, in the derivative endings *σ-δ* (ζ), *ν-τ*, &c., or in the preposition *s-ma*, which, when affixed to a verb after the person-ending, and without augment, gives it a past signification (above, p. 167). There appears to be this difference between the use of pronominal insertions in verbs and those in nouns. The ideas of agency, time, &c., are necessarily brought forward much more prominently in the former; the significance of these pronominal elements is therefore more easily recognizable, and shades of meaning may be discriminated in the verb, where an apparent identity exists in the noun. There is no reason, etymologically speaking, why *θα*, and *ια*, should not be considered as identical, any more than there is for distinguishing between the noun-endings *-σις*, *-ια*; the adjectives in *-σιμος*, *-ιμος*; and the genitives in *-(σ)ιο*, *-ιο*. But *θα*, *σά*, *ια*, are all terminations capable of subsisting by themselves, and we do find in the verb that the addition of the last to either of the former, creates a modification of meaning, for the ending *σά* alone makes a simple future, but *σ-ya* forms a desiderative, and similarly, *θα* alone does not form a passive tense, though *thya* and *ya* do. Thus, *per-eo* (*per-yo*, comp. *inter-eo*) means "to be at the end", "to die"; where the formative syllable has nothing to do with the verb *eo*: but *πέρ-θω* means "to bring to an end", or "cause to

perish." And thus too $\theta\alpha\tilde{-}$, in its simpler form, appears as a mere derivative suffix to the present tense, as in $\pi\epsilon\lambda\acute{\alpha}\theta\omega$, $\phi\lambda\epsilon\gamma\acute{\epsilon}\theta\omega$, $\nu\epsilon\mu\acute{\epsilon}\theta\omega$, $\theta\alpha\lambda\acute{\epsilon}\theta\omega$, $\phi\alpha\acute{\epsilon}\theta\omega$, $\phi\theta\iota\nu\acute{\upsilon}\theta\omega$, &c. Besides these we have, but always in the past tense, such forms as $\acute{\epsilon}\delta\iota\omega\kappa\alpha\theta\omicron\nu$ from $\delta\iota\omega\kappa\omega$, &c., with regard to which a question has been raised, whether they are aorists or imperfects (Elmsley *ad Eurip. Med.* 186. Pierson, *Mæris*, p. 118. Ruhnken, *Timæus*, p. 87. Hermann *ad Soph. Œd. Col.* 1619): we are quite sure, as well from the meaning as from the analogy of the presents in $-\theta\omega$, that they are all imperfects.

It is possible that this pronominal element may not be altogether unconnected with the verbal root $\theta\epsilon$; only we must be careful not to imagine with Bopp and Pott, that any tense of $\tau\acute{\iota}\theta\eta\mu\iota$,— $\acute{\epsilon}\theta\eta\nu$ for instance,—is added to the root or crude form of the verb; that would be to reverse every principle and analogy of language. The idea of location is of course intimately connected with that of the verbal root $\theta\epsilon$ -, and we can easily conceive that the pronoun has extended its influence to this verb as well as to the aorist in question, and to the passive infinitive. We also discern this element in $\mu\acute{o}\chi\text{-}\theta\omicron\varsigma$ "a labour", "something great placed or laid upon one;" compare the first syllable with $\mu\acute{o}\gamma\text{-}\iota\varsigma$, $\mu\omicron\gamma\text{-}\acute{\epsilon}\omega$, $\mu\acute{\epsilon}\gamma\text{-}\alpha\varsigma$, *magnus*, $\mu\alpha\acute{\iota}$ (Hesych.), *macte*, Sanscrit *mahat*, *mahita*, "worship", &c. Also in $\acute{o}\rho\mu\alpha\text{-}\theta\acute{o}\varsigma$, "a thing laid in vows" ($\acute{o}\rho\mu\omicron\iota$). But we have the compound form with a kind of passive sense in $\acute{\epsilon}\sigma\text{-}\theta\eta\varsigma$, from $\acute{\epsilon}\nu\text{-}\nu\upsilon\mu\iota$ for $\text{F}\acute{\epsilon}\sigma\text{-}\nu\upsilon\mu\iota$ (Sanskrit *vas*, Latin *ves-tis*), and in $\acute{\epsilon}\sigma\text{-}\theta\acute{\iota}\omega$ (root $\acute{\epsilon}\delta$ -), where *tha* is combined with the additional element *ya*, as in the first aorist passive. That this last has for its future $\acute{\epsilon}\delta\omicron\mu\alpha\iota$, clearly of a middle form, would of itself be some proof that the word is not altogether of an active nature. The following considerations add much weight to this view. We find that the cognate word $\pi\acute{\iota}\text{-}\nu\omega$ has only the future $\pi\acute{\iota}\omicron\mu\alpha\iota$. These two futures are, as we shall show in the following chapter, nothing but conjunctives, like $\theta\acute{\epsilon}\iota\omicron\mu\alpha\iota$ for $\theta\acute{\epsilon}\omega\mu\alpha\iota$, $\beta\acute{\epsilon}\iota\omicron\mu\alpha\iota$ or $\beta\acute{\epsilon}\omicron\mu\alpha\iota$, &c. We are convinced that $\pi\acute{\iota}\text{-}\nu\omega$ as well as $\acute{\epsilon}\sigma\text{-}\theta\acute{\iota}\omega$ is a deponent verb; in other words, that although the action may pass on to the object eaten or drunk, yet, the agent being considered as the object benefited, he is spoken of in the locative and not in the instrumental case. For this reason we find that all verbs in Greek and Latin, which,

though they may express an action, confine the benefits or results of that action to the agent, are middle or deponent in form, and, for the same reason, the Greeks use the middle voice to express that a person is not the instrument, but the cause, of an action. This explains the middle or deponent use of *vescor*, γεύομαι (as opposed to γεύω), *utor*, *fruor*, χρῶμαι, *nanciscor*, δέχομαι, *adipiscor*, *sortior*, &c.; also of verbs denoting the exercise of the senses, as αἰσθάνομαι, *contemplor*, θεῶμαι, ὀσφραίνομαι, *conspicari*, *intueri*, ἀκροᾶσθαι, &c.; of words implying mental emotions, as *mirari*, *vereri*, *lætari*, &c. In Greek we find some such words with the present tense of an active, but the future of a deponent form; thus, ἀκούω makes ἀκούσομαι; θαυμάζω, θαυμάσομαι; θνήσκω, θανοῦμαι; πάσχω, πείσομαι; &c. It is easy to understand this: when we speak of something that will make an impression upon our senses or feelings, or, in general, befall us, as future, we consider ourselves as merely the object of these outward impressions or accidents; but when we speak of their present effect, we consider ourselves as an agent or inchoative in respect to them. If one says “I am hearing”, he asserts that he is exercising that sense, if he says “I shall hear”, he says merely that there will be sound or noise: again, if he says “I am dying”, he speaks of his being on the way towards death, and therefore, an inchoative verb like θνήσκω might very well be used: if he says “I shall die”, he merely states that his death will take place, that he will be dead (θανεῖται), in which event he cannot be considered as an actor at all. Some such method might be adopted to explain all those numerous instances in Greek, where we find an active present with a deponent future. M. Burnouf justly remarks (*l. l.* § 204) that the active verbs with middle futures, are precisely those which in the French language, are reflected in form but not in sense; thus, σιγήσομαι or σιωπήσωμαι is *je me tairai*; βήσομαι, *je m'en irai*; θαυμάσομαι, *je m'étonnerai*; ἀμαρτήσομαι, *je me tromperai*; οἰμώζομαι, *je me lamenterai*; σπουδάσομαι, *je m'étudierai à*; &c.

It is remarkable that the passive futures formed from the aorists in -ην and -θην, have person-endings of the middle form. It is an irregularity that they should be formed from the aorists at all, and we can only explain it on the supposition that they were only constructed when the future middle, as it is called, which is often used in a passive sense (Monk on *Eurip. Hippolyt.*

1458), was appropriated to the active verb, and another passive future was necessary (*Journal of Education*, IV. p. 158); at all events, they must be considered as subsequent to the other forms of the future.

Another instance of the formation of a tense by the addition of a suffix used to form a set of verbs, is furnished by the iterative tenses in *-σκον*. This ending is affixed to the imperfect and to both aorists of the indicative, and the augment is omitted; thus *ἔτυπτον* makes *τύπτεσκον*; *ἔτυψα*, *τύψασκον*; and *ἔλιπον*, *λίπεσκον*; and so also in the passive. This mode of forming tenses is peculiar to the Ionians, who were in the habit of omitting the augment of the historical tenses in their descriptive poetry, and from them the custom was introduced in the long narrative speeches which the Epic element of the Athenian drama permitted. These tenses, according to Buttman (*Ausführl. Sprl.* § 94, *Anm.* 3), denote not a continued, but a repeated action. The iterative formed from the imperfect implies sometimes an action of some duration frequently repeated—as in Herod. III. 119, *ἡ γυνὴ κλαίεσκε καὶ ὀδυρέσκετο*—at other times a momentary action repeated, Herod. I. 185, *ἐπιτείνεσκε, ὅκως μὲν ἡμέρη γένοιτο, ξύλα τετράγωνα—τὰς δὲ νύκτας τὰ ξύλα ταῦτα ἀπαιρέεσκον*: the iterative formed from the aorist conveys the latter meaning only; Herod. IV. 130, *ὅκως—καταλίποιν, αὐτοὶ ἂν ὑπεξήλυνον, οἱ δὲ ἂν Πέρσαι ἐπέλθοντες λάβεσκον τὰ πρόβατα*. The aorist iteratives occur very seldom, and those from the first aorist are never found in prose. There is one instance in Herodotus (III. 17) where the word *ἄρδεσκε* is used as an imperfect, but, as Buttman remarks, though continuation in *time* is implied, there is still a signification of repetition in *space* in this passage. It is also true, though Buttman has not remarked this, that the imperfect is used in Attic prose as an iterative, in connexion with *ὅποτε* and the optative: as, for instance, Xen. *Anab.* IV. 5, § 27, *ἔδει ὅποτε τις διψῶν*, where certainly a repetition is implied. But the fact is, that the ideas of repetition and continuance are intimately connected, the former being related to the latter as the idea of a series of points is to that of a line; and therefore as the generating or suggesting idea is to the idea suggested or generated.

There is, as well in the Greek as in the Latin language, a numerous class of verbs ending in *-σκω*. Buttman is inclined to

consider these terminations as totally different from the iterative preterites of which we have been speaking (*Ausführl. Sprl.* § 94, 4 note), but there seems to be a sufficient similarity of meaning in the two cases, to justify us in the belief that both formations owe their origin to the same principle, although the original meaning of the ending seems in the case of the verbs in *-σκω* to have been split up into a number of subordinate significations. The sense of the Latin verbs in *-sco* is generally inchoative: *cre-sco*, *gli-sco*, *quie-sco*, *na-scor*, *no-sco*, *di-sco*, *sci-sco*, *ira-scor*, *paci-scor*, *puera-sco*, *tenera-sco*, *illuce-sco*, *grande-sco*, *mature-sco*, *expergi-sco*, *contice-sco*, &c. It is to be remarked, that not one of these keeps the *-sco*-form in the perfect; which is *cré-vi*, *quie-vi*, *contic-ui*, &c. Pott has truly remarked (*Etym. Forsch.* I. p. 56), that many Greek verbs in *-σκω*, and more than people generally suppose, are genuine inchoatives; he instances ἡβά-σκω, γηρά-σκω, γενειά-σκω, κυί-σκω and κυί-σκομαι, θνή-σκω (Æolic θναί-σκω), “to be taken in death,” μι-μνή-σκομαι (Æolic μι-μναί-σκομαι), γι-γνώ-σκω. In others this meaning is less clearly seen, as ἀλθί-σκω, “I make sound,” ἰλά-σκομαι, “I make myself gracious,” γαννύ-σκομαι, “I become merry,” ἀλί-σκομαι, “I fall into the enemy’s hands.” The following have a causative signification, μεθύ-σκω, πιπί-σκω, γαμί-σκω and γαμί-ζω, πινύ-σκω and πινύσσω, διδά-σκω, ἐπιβα-σκέμεν, πιφάυ-σκω and πιφά-σκομαι, ἀναβιώ-σκομαι, μιμνή-σκω, ἀρέ-σκω, &c. Now it is sufficiently obvious that the only difference between an inchoative and a causative is this, that the one is a passive, the other an active relation. But the idea of iteration or repetition presupposes the idea of a beginning, and the very distinction between an imperfect and an iterative preterite is, that the former presumes a line, the latter a sequence of points, the former unbroken continuation, the latter a series of recommencements.

We find an analogous ending, with a similar meaning, in nouns derived from verbs: thus we have δί-σκος from δίκειν, λέσχη from λέγειν, αἶσχος from αἰδοῦμαι: in the two last instances the *κ* is aspirated on the compensation principle, like πα-σχω, root παθ-, for the root of the former is λεγ- or λεF, as we shall show hereafter: of the latter Fαιδ-, Lithuanian *gēda*: the first seems to stand for δίκ-σκος, or the *κ* has been dropt as in λά-σκω (λακεῖν), *di-sco* (*doc-ere*), μί-σγω, *mi-sceo* (μιγῆναι), ἴσχω (ἔχω), (above, p. 298).

When we compare this suffix with the endings θya , σya mentioned above, with the conjugational ending $-\zeta\omega = \sigma\delta\omega$, and with the Sanscrit tense suffix sma , we shall perhaps be willing to allow, that all three may be compounds of the pronominal or prepositional element sa or θa , with the pronominal elements sa , ka , ya , ma and da respectively. The pronominal roots sa , ka , are ultimately the same; as tense-endings we have established their identity. If, then, our view of the termination $-\sigma\kappa$ is correct, this is a junction of two forms of the same element just like the very common pronominal endings $-n-t$, $-t\tilde{a}n\tilde{a}$, &c.

CHAPTER III.

THE MOODS AND PARTICIPLES.

(1) CONJUNCTIVE AND OPTATIVE.

ALTHOUGH it is customary in Greek grammars to class the conjunctive and optative as distinct moods, it has long been remarked by scholars, on syntactical grounds, that, considered in their relation to one another and to the other moods, they must be regarded as differing in tense only. It has also been observed that the person-endings of the conjunctive correspond to the primary forms, or those of the primary tenses, while the person-endings of the optative always agree with the secondary forms, or those of the historical tenses (Buttmann, *Ausführl. Sprl.* § 88, 3, 4). A more exact etymological and syntactical examination of the whole question will show clearly, that, in the oldest form of the language, these moods have no right to a separate classification, and at the same time enable us to point out the real connexion between them.

The form which the conjunctive generally presents, differs from the indicative in the following points. Where the indicative has ω , ov , ω , the conjunctive has ω ; where the indicative has ϵ , $\epsilon\iota$, η , the conjunctive has η , η : the α of the first and second persons of the first aorist active and middle, become ω and η respectively. There is no reason to believe that there is any more essential difference between the ω and η of the conjunctive, than there is between the o and ϵ of the indicative; as the two latter represent the short $\tilde{a}$ in Sanscrit, the two former may be considered as substitutes for the long $\bar{a}$, which is the characteristic of the *Lét* or conjunctive mood in the Vêda dialect. This long $\bar{a}$ is found in the conjunctive of the Doric dialect: for instance, we have $\iota\sigma\hat{\alpha}\nu\tau\iota$ (*Corpus Inscript.* Vol. II. p. 641, no. 3053); $\epsilon\pi\iota\sigma\tau\hat{\alpha}\nu\tau\iota$ (*ib.* p. 413, no. 2556 l. 68); $\epsilon\rho\hat{\alpha}\tau\alpha\iota$ (Pindar, *Pyth.* IV. 92=164); $\beta\hat{\alpha}\mu\epsilon\varsigma$ (Theocr. XV. 22); see Kuhn l. l. p. 39. In the older writers, the root syllable alone is changed (sometimes by the addition of an ι), the connecting-

vowel not being affected, though this seems to take place only in the dual and plural: thus we have βείομεν, θείομεν, στείομεν, παρστηέτον, δώομεν, γνώομεν. In the passive this may take place in the singular, as in ἀποθείομαι. In the active we occasionally find both root-vowel and connecting-vowel affected by *guna*, as in στήης, ἐμβήη, θείης, ἐφείης, δώη, &c. Buttmann supposes the existence of conjunctives without any mark to distinguish them from the indicative (*Ausführl. Spl.* § 88, *Anm.* 3), but these could only be corrupt and mutilated forms. We believe that all the instances which he mentions belong to the analogy of βείομεν, the production having fallen upon the first syllable. With regard to these epic forms in general, it is clear, that if θείω, θείης, θείη, θείομεν, ἀποθείομαι are to be considered as belonging to the same form, the short connecting vowel is due to the weight of the person-endings. It is equally clear, that they are all futures, and perhaps very ancient forms of the future: at least, forms answering to θείομεν, ἴομεν are used with a future signification in Homer; βείομαι, for instance, is a regular future. Perhaps in the original form the *guna* did not extend to both root and connecting-vowel. There are other instances of this superfluous strengthening of the form: thus on the analogy of κομιοῦμαι and κομίσομαι we should expect only πλεῖφοῦμαι, or πλεύσομαι from πλέω: whereas we have also πλευσοῦμαι: τιμάοιμι would be a sufficient optative from τιμάω, but we have also τιμῶην.

The characteristic of the optative is ι, which forms a diphthong with the connecting-vowel: to this the long vowel η is occasionally subjoined. The person-endings are of the secondary form, with the exception of the first person, which is generally -μι, though it seems that the shorter form in -ν was here, as in the imperfect, occasionally substituted for it, even in those cases where the first person of the optative ended like the indicative: thus we have in Euripides, ἄφρων ἂν εἶην εἰ τρέφουν τὰ τῶν πέλας (*Etymol. Magnum*, s. v. τρέφουν). The optatives, which add η to the characteristic ι, always form the first person in -ν. The reason for the difference is obvious. In τρέφοιμι, which has no augment, there is no reason why the weight of the verb should drive off the full ending; but the longer form in -ιην of course would not admit of it. In the Æolic dialect, the characteristic ι was sometimes omitted, as already included

in the *η*. Thus we have in a passage, probably from Sappho, quoted by Apollonius (*de Syntaxi*, III. 22, p. 247 Bekker);

αἴθ' ἐγώ, χρυσοστέφαν' Ἀφροδίτα,
τόνδε τὸν πάλον λαχόην.

where we adopt the emendation proposed by Bergk (*Rheinisch. Mus.* for 1835, p. 218), which is confirmed as well by the metre as by the remark in the *Etymologicum Magnum*, p. 558, Λαχόην ἔστι λάχοιμι, λάχοις, λάχοι. Bopp has suggested (*Annals of Oriental Literat.* p. 23) an explanation of this characteristic *i* which at least deserves to be mentioned. He says, "The reason why the vowel *i* expresses the potential mood cannot be discovered in Greek, in Latin, nor perhaps in any other European language, but in Sanscrit, the radical element *î* expresses wishing, desiring; and what syllable could be more properly employed to indicate an optative, than the one to which the Hindu grammarians had given the primary signification of *Kânti*—*having desire*? I will not affirm that this is the primitive meaning of the root *î*, and that the grammarians had a sufficient reason for putting *Kânti* at the head of their explanations, but certain it is, that *îmas* has, among other significations, that of *we desire* or *wish*. Now it is remarkable, that the sense expressed in Sanscrit, and the languages here compared with it, by a syllable, signifying desire, incorporated into the verb, is in English, and often in German also, expressed by detached auxiliary verbs, having the primary signification of wishing (In Notker we read, *I mahta baldur weinon*—vellem vehementer plorare). The German *mögen* has frequently this signification, and the English *may* is of the same origin, derived from the Saxon *magan*, in Gothic likewise *magan*." We have before expressed our disapproval of the theory of agglutination, which Bopp has introduced; we think it most unphilosophical. The relations expressed by verbs cannot be modified in the way of inflexion by composition with other verbs: this must always take place in the same way with the modifications of nouns; namely, by pronominal insertion between the root and the person-ending in verbs, as between the root and case ending in nouns. Of the pronominal elements which may be so inserted, there is no one more common than *-ια*, Sanscrit *ya*, corresponding to the second pronoun or the relative form. We have seen it inserted to

form the neuter aorist in $\eta\nu = \gamma\alpha\nu$, and the Sanscrit passive. It lurks in a large class of derivative verbs in Greek, either concealed under an assimilation, as in $\phi\rho\acute{\iota}\sigma\sigma\omega$ for $\phi\rho\acute{\iota}\kappa\gamma\alpha\mu\iota$ from $\phi\rho\acute{\iota}\kappa\eta$, or represented only by a vowel as in $\phi\iota\lambda\acute{\epsilon}\omega$ for $\phi\acute{\iota}\lambda\gamma\alpha\mu\iota$ from $\phi\acute{\iota}\lambda\omicron\varsigma$, $\tau\iota\mu\acute{\alpha}\omega$ for $\tau\iota\mu\acute{\alpha}\gamma\alpha\mu\iota$ from $\tau\iota\mu\acute{\eta}$, &c. It is also used to form causal, nominal, and intensive verbs in Sanscrit; and, in Latin, we have derivative verbs in ao , eo , $-io$; and neuter verbs in $-eo$; all of which involve this affix. We do not intend to enter here into any metaphysical discussion in the propriety of selecting such an element for all these purposes. We may add, that as the element $\iota\alpha$ or $\gamma\alpha$ is employed to form both the future tense and the optative mood, so the cognate element $\sigma-$, sa , which is used to form the future in Greek and Sanscrit, also forms the desiderative verb in the latter language.

Having now considered the forms of the conjunctive and optative separately, we must endeavour to determine the connexion between them. In the last chapter we mentioned that the desiderative $\tau\nu\psi\acute{\epsilon}\iota\omega$ was related to the so-called optative aorist $\tau\acute{\upsilon}\psi\epsilon\iota\alpha$, as present to imperfect, as definite tense to indefinite; the augment of the latter is omitted like that of the iterative preterits. Now if we take the verbs in $-\mu\iota$, which present us with the oldest forms, we shall find a conjunctive $\theta\acute{\epsilon}\iota\omega$, $\theta\acute{\epsilon}\iota\eta\varsigma$ corresponding to an optative $\theta\acute{\epsilon}\iota\eta\nu$, $\theta\acute{\epsilon}\iota\eta\varsigma$, &c. The conjunctive has the primary form of the person-endings, the optative, the secondary form: in other respects they do not differ, for they both contain the verb root affected by the insertion of ι : Compare $\theta\acute{\epsilon}\iota\omega$, $\theta\acute{\epsilon}\iota\eta\varsigma$, &c.; $\theta\acute{\epsilon}\iota\eta\nu$, $\theta\acute{\epsilon}\iota\eta\varsigma$, &c.; with $\tau\acute{\iota}\theta\eta\mu\iota$ ($\tau\iota-\theta\acute{\epsilon}-\omega$), $\tau\acute{\iota}\theta\eta\varsigma$, &c.; $\acute{\epsilon}\tau\acute{\iota}\theta\eta\nu$, $\acute{\epsilon}\tau\acute{\iota}\theta\eta\varsigma$, &c. In the existing state, the conjunctive is just as heavy a form as the optative; we must conclude, however, that, as the optative has the lighter endings, it must have been originally a heavier form than the conjunctive, and as this could result only from its having some prefix which the conjunctive wanted, it follows that it had the augment, or was related to the conjunctive as aorist to future. When the optative ceased to be used as a past tense in primary sentences, it would naturally lose its augment, or mark of past time, retaining, however, its lighter person-endings as a mark of what it once was. The other differences between it and the conjunctive would spring up as time and use widened the gap which separated the parent tense from its offspring.

On the whole, then, we may say that there were two methods of expressing future time by pronominal insertion: in the one, the second element was inserted under the form σ -, *sa*; in the other, the same element appeared as *ia*-, *ya*. These two methods were occasionally united, as in the desiderative verbs in $-\sigma\epsilon\acute{\iota}\omega$ (Latin *-rio*); at other times, the latter only was adopted, as in the old conjunctives or futures $\beta\epsilon\acute{\iota}\omicron\mu\alpha\iota$, $\beta\epsilon\acute{\iota}\omicron\mu\epsilon\nu$, $\theta\epsilon\acute{\iota}\omicron\mu\epsilon\nu$, &c.; at other times, only the sigmatic form was employed, as in the more modern futures indicative. To all these three forms of the future there were corresponding forms of aorists or past tenses; to the first, the so-called Æolic optative aorist in $-\sigma\epsilon\iota\alpha$; to the second, the ordinary optative; to the third, the ordinary first aorist. The last alone preserved the augment, because in the indicative mood the idea of past time predominated in this form of the indefinite tense; in the other two the augment was omitted, because they are never used as direct expressions of past time, though they always bear the preterite meaning in subordinate sentences. We do not say that there ever existed a desiderative form of every tense of the indicative mood to which there is a corresponding tense in the optative; there might have been one, and there must have been one originally; but afterwards the tenses of the optative were formed by analogy, without the introduction of the intermediate form of the conjunctive. The only very remarkable variety in the formation of these optatives, desideratives, and futures, is, that the *i* is sometimes appended to the root vowel, as in $\theta\epsilon\acute{\iota}\omicron\mu\epsilon\nu$, at other times to the connecting vowel, as $\tau\acute{\upsilon}\pi\tau\omicron\iota\mu\iota$; and sometimes placed after the *s*, as in $\delta\rho\alpha\sigma\epsilon\acute{\iota}\omega$; at other times before the *s* or its substitute, as in $\theta\epsilon\acute{\iota}\eta\varsigma$, $\epsilon\acute{\pi}\alpha\iota\nu\acute{\iota}\omega$ (Greg. Corinth, p. 229), and in some of the Sanscrit volitives (Wilkins, p. 365). These varieties are due to subsequent analogies, and not to any thing in the original principles of the language.

We shall now proceed to show, that the syntactical relation of the optative to the conjunctive is that which subsists between indefinite and definite tenses. It is well known to every student of Greek, that, in connected sentences, the Latin subjunctive present corresponds to the Greek conjunctive, and the Latin subjunctive imperfect to the Greek optative; in other words, the Greeks used the conjunctive in sentences dependent upon a verb in the present or future tense, and the optative in those

which were dependent on a verb in the past tense: for instance, γράφω, ἵνα μανθάνῃς corresponds to *scribo, ut discas*; but ἔγραψα, ἵνα μανθάνῃς to *scripsi, ut disceres*. Therefore, the conjunctive is a definite tense, for it has relation to the present moment, and the optative is indefinite, for it must be determined by some particular time or circumstance referred to. The following considerations will show, that, as well in dependent as in connected sentences, the conjunctive corresponds to a future, and the optative to the aorist derived from it. And first, the conjunctive appears as an actual future in Homer. Thus we have in the *Iliad*, i. 262:

οὐ γάρ πω τοίους ἴδον ἀνέρας, οὐδὲ ἴδωμαι.

Iliad, vi. 459:

καί ποτέ τις εἶπησι, ἰδὼν κατὰ δάκρυ χέουσιν
 “Ἐκτορος, ἥδε γυνή, κ. τ. λ.”
 ὥς ποτέ τις ἐρέει,

where the future, which follows, clearly shows that the conjunctive before it is a future. *Iliad*, vii. 197:

οὐ γάρ τις με βίῃ γε ἐκὼν ἀέκοντα δίηται.

Odyss. vi. 201:

οὐκ ἔσθ' οὗτος ἀνὴρ διερὸς βροτός, οὐδὲ γένηται,
 ὅς κεν Φαιήκων ἀνδρῶν ἐς γαῖαν ἵκηται,

on which see Wyttenbach (*Eclog. Histor.*) quoted by Gaisford (in his notes on Herodotus, Vol. i. p. 5). *Odyss.* xvi. 437:

οὐκ ἔσθ' οὗτος ἀνὴρ, οὐδ' ἔσσεται, οὐδὲ γένηται,
 ὅς κεν Τηλεμάχῳ σῶ νιέει χεῖρας ἐποίσει.

It will be observed that we have ὅς κεν with the future in this passage, but ὅς κεν with the conjunctive in that which precedes. Instead of this direct future with οὐ, the Attics employed οὐ μὴ with the aorist subjunctive; thus we have in Plato, *Respubl.* VI. p. 472, E, οὔτε γὰρ γίγνεται, οὔτε γέγονεν, οὐδὲ οὐν μὴ ποτε γένηται κ. τ. λ., where οὐδὲ μὴ ποτε γένηται is perfectly synonymous with the οὐδὲ γένηται of the two passages from the *Odyssey*. The combination of negatives οὐ μὴ is found not only before the aorist subjunctive with a negative future sense, but also before the future indicative, generally in a prohibitive

sense. In the latter case, Elmsley and others would take the sentence interrogatively, according to the method adopted with regard to the positive use of *οὐκοῦν*. Thus, e. g., Euripid. *Bacchæ*, 340 :

οὐ μὴ προσοίσεις χεῖρα, βακχεύσεις δ' ἰών,
μηδ' ἐξομόρξει μωρίαν τήν σήν ἐμοί;

should mean, according to these critics, “will you not keep off your hand (will you not—not put your hand near me), and go and play the Bacchanal, and not wipe off your folly on me.” But *οὐ μὴ* with the conjunctive is explained as an ellipse—*οὐ μὴ γένηται* being equivalent to *οὐ δέος ἐστὶ μὴ γένηται*, “there is no fear lest it should happen.” Neither the one nor the other of these explanations is perfectly accurate. With regard to *οὐ μὴ* with the future, it is not true that this combination always implies a prohibition. There are passages in which it is perfectly equivalent in meaning to *οὐ μὴ* with the conjunctive; as in Sophocles, *Œd. Col.* 176 :

οὗτοι μὴ ποτέ σ' ἐκ τῶνδ' ἐδράνων,
ὦ γέρον, ἄκοντά τις ἄξει.

Electra, 1052 :

ἀλλ' εἴσιθ'· οὐ σοι μὴ μεθέψομαί ποτε,
οὐδ' ἦν σφόδρ' ἱμείρουσα τυγχάνης.

Euripides, *Phæniss.* 1606 :

σαφῶς γὰρ εἶπε Τειρεσίας, οὐ μὴ ποτε,
σοῦ τήνδε γῆν οἰκοῦντος, εὖ πράξειν πόλιν.

Aristoph. *Ran.* 508 :

μὰ τὸν Ἀπόλλω, οὐ μὴ σ' ἐγὼ
περιόψομαι ἀπελθόντα.

It is obvious that an assertion, not a prohibition, is implied in these passages. The proper explanation of those from Sophocles and Aristophanes has been suggested by Hermann (on Elmsley's *Medea*, v. 1120). He says that the general meaning of *οὐ μὴ* with the future is due entirely to the circumstance, that in the cases, where a prohibition is implied, the verb is always in the

second person ; — and “ will you not not touch,” &c., is equivalent to “ don’t touch.” But in the cases which he is discussing, the verb is in the first or third person ; and the infinitive, in the passage which we have quoted from Euripides, implies a third person. Now when we say, as in the passage from the *Ædipus Coloneus*, “ will not a person not drag you from this seat against your will,” this is equivalent to, “ will he not suffer you to remain,” which implies “ of course he will ;” and so in the other passages. With regard to οὐ μὴ with the conjunctive, Hermann thinks, that, although an ellipse such as we have mentioned is possible—for we have the full form in Herodotus, e. g. in I. 84, οὐ γὰρ ἦν δεινὸν μὴ ἀλῶ ποτε—yet this ellipse would be somewhat harsh and unnatural, and it would be much better to follow the analogy of the future, and suppose that οὐ μὴ with conjunctive is also interrogative : thus Æschylus, *Sept. c. Thebas*, 38 :

καὶ τῶνδ’ ἀκούσας οὐ τι μὴ ληφθῶ δόλῳ ;

would mean, “ Having heard of these things, shall I not not-be-caught by stratagem?” i. e. “ shall I not be safe from it?” which implies, “ of course I shall.” We think this view a sound one ; the following illustrations will perhaps convince our readers that it is so. There can be no doubt that οὐ, with the future or subjunctive taken interrogatively, is equivalent to an injunction or exhortation. The future is generally in the second person : thus, οὐ μενεῖς ; means “ stop !” ; the conjunctive in the first, as οὐκ ἴω ; “ shall I not go?” We have a good analogy for this in the use of *quin* by the best Latin writers. This particle, which is equivalent to *cur non*, is constantly used with the indicative present, taken interrogatively, but always implying an exhortation ; thus we have, Plautus, *Menæchm.* II. 1, 22 : *Quin nos hinc domum redimus?* Terence, *Andr.* IV. 4, 15 : *Quin dicis unde est clare?* Livy, I. 57 : *Quin, si vigor juventæ inest, conscendimus equos?* where see Drakenborch’s note : so that Bentley is quite right in reading *quin redimus?* instead of *quin redeamus?* in Ter. *Eunuch.* IV. 7, 41. It is also clear that μὴ, with the conjunctive or future, is the expression of a direct prohibition. It is unnecessary to give any instance to show that μὴ τύψῃς is equivalent to μὴ τύπτει, and so forth. The imperative use of μὴ with the future has been denied by Elmsley, who would substitute the conjunctive for the future in

Euripides, *Med.* 804, λέξεις δὲ μηδὲν τῶν ἐμοὶ δεδογμένων, and would either emend or explain away a number of other passages which he quotes in his note upon that line, but which are, we think, sufficient to justify the construction. Matthiæ (*Gr. Gr.* § 511, 3) quotes two or three others, and we may add Soph. *Aj.* 572, καὶ τὰμὰ τεύχη μήτ' ἀγωνάρχαι τινὲς θήσουσ' Ἀχαιοῖς, μήθ' ὁ λυμεὼν ἐμοί (above, p. 382). As, therefore, οὐ with both future and conjunctive, taken interrogatively, may convey a positive injunction, and μὴ with either of the same inflexions, taken imperatively, may convey a negative command, it would not be unnatural that, when command with regard to one act and prohibition with regard to another were to be expressed at once, the first would be effected by οὐ with the future or conjunctive, taken interrogatively, the second by μὴ with the future or conjunctive, without any interrogation. We have an instance of this in Æschyl. *Sept. c. Theb.* 232:

οὐ σίγα; μηδὲν τῶνδ' ἐρεῖς κατὰ πτόλιν.

In most cases, however, the two sentences, which generally seem to have referred to a command of something and the prohibition of its opposite, would be joined together by some copulative conjunction, and thus the whole would be included in the interrogation, as in the passage from the *Bacchæ* quoted above, in Soph. *Aj.* 75:

οὐ σίγ' ἀνέξει μηδὲ δειλίαν ἀρεῖς;

and in Eurip. *Hippolyt.* 498:

ὦ δεινὰ λέξας, οὐχὶ συγκλείσεις στόμα,
καὶ μὴ μεθήσεις αὐθις αἰσχίστους λόγους;

From this custom of joining together an injunction of any thing and a prohibition of its contrary, would arise the custom of employing a combination of the two negatives to express in the strongest terms an union of the two imperatives; and this combination would always be used, by implication, interrogatively, and with two shades of meaning. As the future of the longer form was more used in connexion with the direct negative οὐ, and in the second person, this tense would be more generally employed by the Attics to express a prohibition in the second person by means of οὐ μὴ taken interrogatively: and as the

conjunctive, or shorter form of the future, was more frequently subjoined to the indirect or subjective negation $\mu\eta$, to express a direct prohibition, it would be more usually employed, in connexion with $\text{o}\acute{\upsilon}\ \mu\eta$ and in an interrogative sense, to express the direct negation of something future, in the same sense as $\text{o}\acute{\upsilon}$ was used with the conjunctive by Homer. That in the collocation $\text{o}\acute{\upsilon}\ \mu\eta$, whether with the future or with the conjunctive, the notion of the verb is negated and reversed by $\mu\eta$, and the question expressed by $\text{o}\acute{\upsilon}$, is clear from the nature of the case. For as $\text{o}\acute{\upsilon}\ \mu\epsilon\nu\epsilon\acute{\iota}\varsigma$; is equivalent to $\mu\acute{\epsilon}\nu\epsilon$, and $\text{o}\acute{\upsilon}\kappa\ \acute{\iota}\omega$; to $\mu\acute{\epsilon}\iota\nu\omega$, so $\text{o}\acute{\upsilon}\ \mu\eta\ \mu\epsilon\nu\epsilon\acute{\iota}\varsigma$; is equivalent to $\text{o}\acute{\upsilon}\kappa\ \epsilon\acute{\iota}$; and $\text{o}\acute{\upsilon}\ \mu\eta\ \mu\acute{\epsilon}\iota\nu\omega$; to $\text{o}\acute{\upsilon}\kappa\ \acute{\iota}\omega$; This is also shown by the fact, that, if by any chance the combination $\text{o}\acute{\upsilon}\ \mu\eta$ is separated from the verb, the $\mu\eta$ is repeated immediately before the verb to which it belongs; thus in Soph. *Æd. Tyr.* 328:

$\epsilon\gamma\omega\ \delta'\ \text{o}\acute{\upsilon}\ \mu\eta\ \text{ποτε},$
 $\tau\acute{\alpha}\mu' \ \acute{\omega}\varsigma\ \acute{\alpha}\nu\ \epsilon\acute{\iota}\text{πω},\ \mu\eta\ \tau\acute{\alpha}\ \sigma'\ \epsilon\kappa\phi\acute{\eta}\nu\omega\ \kappa\alpha\kappa\acute{\alpha}.$

In this syntactical peculiarity of the Greek language we see clear enough traces of the original identity of the future and conjunctive, in an actual and strongly marked divergency of use. The employment of the conjunctive in dependent or connected sentences, and its contrast here to the optative, will show most directly its affinity to the future. It almost invariably follows $\epsilon\acute{\alpha}\nu$ or any relative word succeeded by $\acute{\alpha}\nu$ in the protasis, in which case it is equivalent to a conditional future, and is generally followed in the apodosis by the future indicative, either without $\acute{\alpha}\nu$, which is the ordinary construction, as $\epsilon\acute{\alpha}\nu\ \tau\iota\ \acute{\epsilon}\chi\eta\varsigma$, $\delta\acute{\omega}\sigma\epsilon\iota\varsigma$: or with $\acute{\alpha}\nu$, which is very rare in Attic Greek. In Xenophon, *Cyrop.* VII. 5, § 21, we have $\acute{\omicron}\tau\alpha\nu\ \delta\epsilon\ \kappa\alpha\acute{\iota}\ \acute{\alpha}\acute{\iota}\sigma\theta\omega\nu\tau\alpha\iota\ \eta\mu\acute{\alpha}\varsigma\ \acute{\epsilon}\nu\delta\omicron\nu\ \acute{\omicron}\nu\tau\alpha\varsigma$, $\text{πολ}\acute{\upsilon}\ \acute{\alpha}\nu\ \acute{\epsilon}\tau\iota\ \mu\acute{\alpha}\lambda\lambda\omicron\nu$ $\eta\ \nu\acute{\upsilon}\nu\ \acute{\alpha}\chi\rho\epsilon\acute{\iota}\omicron\iota\ \acute{\epsilon}\sigma\omicron\nu\tau\alpha\iota$. Dindorf omits the $\acute{\alpha}\nu$, though there is no variation in the MSS. so far as we know. A very similar passage is found in Dinarchus (*in Demosth.* § 111): $\text{πολ}\acute{\upsilon}\ \gamma\acute{\alpha}\rho\ \acute{\alpha}\nu\ \delta\iota\kappa\alpha\acute{\iota}\acute{\omicron}\tau\epsilon\rho\omicron\nu\ \acute{\epsilon}\lambda\epsilon\acute{\eta}\sigma\epsilon\tau\epsilon\ \tau\eta\acute{\nu}\ \chi\acute{\omega}\rho\alpha\nu$, where Bekker conjectures $\acute{\epsilon}\lambda\epsilon\acute{\eta}\sigma\alpha\iota\tau\epsilon$, which, as Hermann remarks (*Opuscul.* IV. p. 33), is probable, but not necessary. See also Xen. *Cyrop.* IV. 5, § 49. The conjunctive also follows $\epsilon\acute{\iota}$ or a relative word without $\acute{\alpha}\nu$, but then there is a difference of meaning: thus, $\epsilon\acute{\alpha}\nu\ \tau\iota\ \acute{\epsilon}\chi\eta\varsigma$, $\delta\acute{\omega}\sigma\epsilon\iota\varsigma$ means “if you shall happen to have any

thing (which will probably be the case) you will give it"; but *εἰ τι ἔχῃς* would not have implied any probability,—“if you shall happen to have any thing (which is a mere contingency)” (see *Philol. Mus.* I. p. 96 foll.). If, however, we compare either of these cases with the optative similarly used, we shall easily perceive, that, while the conjunctive in the hypothesis implies only one relation—that is, a relation to the time of speaking—and therefore stands on the same footing with the definite tenses, the optative presumes a relation to some time or circumstance which it is necessary to define. Thus, *εἰ τι ἔχοιμι δίδοίην ἂν* means “if I had any thing under certain circumstances, I would give it”, where the verbs are clearly in the indefinite tense, or express a double relation—of past time in regard to the time of speaking, and of posteriority in reference to the time or circumstance spoken of. Perhaps the most direct proof of this is the usage of the conjunctive or future, as contrasted with that of the optative, in the apodosis. Both the future and conjunctive were constantly used with *ἂν* in the apodosis of conditions in the older state of the language, and we have just shown that even in the Attic writers there were some traces of this usage of *ἂν* with the future. But then the protasis is always expressed, for the conjunctive and future being definite tenses, and expressing only a relation to the time of speaking, would not require *ἂν* when used independently, because *ἂν* refers at once to some other circumstance, which other circumstance, namely, the time of speaking, is presumed in the future and conjunctive: when the condition was expressed, the *ἂν* might accompany the apodosis, though even then it would be unnecessary, and would consequently be omitted when the syntax of the language gained its full developement: in fact, the only cases in which *ἂν* is used with the subjunctive is after such words as *ἔστε* and *πρὶν*, in cases where posteriority in reference to the time of speaking is strongly expressed; as *Æschyl. Prom.* 376:

*ἐγὼ δὲ τὴν πάρουσαν ἀντλήσω τύχην,
ἔστ' ἂν Διὸς φρόνημα λωφήσῃ χόλου.*

Πρὶν is not used with the subjunctive at all, except after negative sentences, and when it is accompanied by *ἂν* it generally follows an imperative sentence: as in *Aristoph. Vesp.* 919:

μὴ προκαταγίγνωσκ', ὦ πάτερ,
πρὶν ἂν γ' ἀκούσης ἀμφοτέρων.

But if the posteriority implied has reference to some other time or circumstance than the present, both ἔστε and πρὶν may be followed by an aorist indicative, even though πρὶν be preceded by a negative sentence: see *Æschyl. Agamemn.* 317,

εἴτ' ἔσκηψεν, ἔστ' ἀφίκετο.

and *Thucyd.* II. 65, οὐ μέντοι πρότερόν γε οἱ ζύμπαντες ἐπαύσαντο ἐν ὀργῇ ἔχοντες αὐτὸν, πρὶν ἐζημίωσαν χρήμασι. When the protasis is omitted, as in a question, we invariably have the future or conjunctive without ἂν, when the question is future in reference to the time of speaking: as in ποῖ τρέψομαι; or ποῖ τραπῶμαι; but when the idea of posteriority has reference to some other time or circumstance, the question is always expressed by the optative with ἂν, as in ποῖ τις ἂν τράποιτο; because it is necessary to express that the tense is indefinite and dependent. The use of the optative after εἴ που or ὅποτε in connexion with the imperfect indicative (above, p. 472) is another instance of the dependent and indefinite nature of this mood. Nor must we omit to mention the use of conjunctive and optative in the same dependance upon a verb in a past tense, an usage which has been very well explained by Dr Arnold (*Thucyd.* III. 22, p. 446). The following are instances; *Herodot.* IX. 51: ἐς τοῦτον δὴ τὸν χῶρον ἐβουλεύσαντο μεταναστῆναι, ἵνα καὶ ὕδατι ἔχωσι χρῆσθαι ἀφθόνως, καὶ οἱ ἱππῆες σφέας μὴ σινοίατο. *Thucyd.* VII. 17: ναῦς ἐπλήρουν, ὅπως ναυμαχίας τε ἀποπειράσωσι, καὶ ἦσσαν οἱ Ἀθηναῖοι κωλύοιεν ἀπαίρειν. *Eurip. Hecuba*, 1120:

ἔδεια, μὴ σοι πολέμιος λειφθεὶς ὁ παῖς
Τροίαν ἀθροίσῃ καὶ ξυνοικίσῃ πάλιν·
γνόντες δ' Ἀχαιοὶ ζῶντα Πριαμίδων τινα
Φρυγῶν ἐς αἶαν αὐθις αἵροιεν στόλον,
κᾶπειτα Θρήκης πέδια τρίβοιεν τάδε
λεηλατοῦντες· γείτοσιν δ' εἶη κακὸν
Τρώων, ἐν ᾧπερ νῦν, ἄναξ, ἐκάμνομεν.

“It seems to me”, says Dr Arnold, “that in all these cases the transition from the subjunctive to the optative mood is meant to show that the several consequences are not contemporaneous, but that the subjunctive mood indicates the *immediate*, and the op-

tative the *remote* consequence of the action contained in the principal verb; the second being a consequence upon the first: and that to mark this gradation, different moods are employed, and the subjunctive is thus used even when the principal verb is in the past tense, because otherwise the distinction intended could not be marked." With regard to the separate use of the optative without ἄν, that is, as a proper optative expressive of a wish, it need only be remarked, that the entire dependance of the verb expressive of the wish upon some circumstance or event is obvious, not only from the fact that the past tense of the auxiliary is used in modern languages, but also from the employment of the limiting particle θε, "in this particular", in connexion with εἰ and the optative (above, p. 270), and from the use of the past tense ὥφελε for the same purpose. It is remarkable that the optative proper is accompanied not only by the conditional, but also by πῶς ἄν, which is the apodosis of a condition implied. This shows how little reason there is to suppose with Bopp that the optative intrinsically and primarily expresses a wish. It only does so as an indefinite and dependent tense, having reference to some other time or circumstance than the present. In our own language "if I only could manage to bring it about!" and "how could I manage to bring it about?" are expressions of the same wish. Inattention to this latter usage has prevented all the commentators from seeing the force of a very natural passage in Æschylus (*Agamemn.* 1198). Cassandra says wildly to the Chorus: ἐκμαρτύρησον προὔμοντας τό μ' εἰδέναι λόγῳ-παλαιὰς τῶνδ' ἁμαρτίας δόμων—"give me a direct testimony confirmed by oath that I am acquainted with the old traditional sins of this family" (we take λόγῳ-παλαιὰς together, like χρονῶ-κλυτη mentioned above, p. 390); to which the Coryphæus replies:

καὶ πῶς ἂν ὄρκος, πῆγμα γενναίως παγέν,
παιώνιον γένοιτο;

"and would to God that an oath, strong as I could make it, might serve as a remedy for them!"

This connexion of the conjunctive and optative appears also from an examination of other languages, as well those which form their moods and tenses by inflexion, as those which use auxiliaries.

In Latin, as we have already mentioned, the subjunctive present corresponds in meaning to the Greek conjunctive, the imperfect to the optative. The Latin future ends in *-bo*, *-bis*, *-bit*, &c., in the first two conjugations, and here and there (as *ibit* and *quibit*) in the fourth: in the third or consonantal conjugation, with the exception of a very few instances in the oldest writers, the future ends in *-am*, *-es*, *-et*, &c. There is, however, no doubt that anciently the future uniformly terminated in *-bo*, *-bis*, *-bit*, &c. The subjunctive present of the first conjugation ends in *-em*, of the three other conjugations in *-am* preceded by the vowel or consonant which closes the crude form. The older ending appears to have been *î* or *ê* throughout the conjugations. We do not know enough of the value of the long *ê* in Latin to be enabled to determine whether in this case it could represent *ai*, as Bopp supposes (*Annals of Oriental Literat.* p. 23); consequently we cannot say with certainty what relation subsists between the first person singular of the future of the second and third conjugations (*reg-am*, &c.), and the present subjunctive of the second, third, and fourth conjugations, which have the same ending, on the one hand; and the other persons of the future, and the present subjunctive of the first conjugation in *-em*, *-es*, *-et*, &c., on the other hand. It seems, however, probable that they are all modifications of a syllable originally the same. That a broader form should be used for the first than for the other persons of the future no Englishman will wonder at, as we are in the habit of saying "I shall", when we say "you will", and *vice versâ*.

The Sanscrit language seems to have lost its primary future. We find an aorist or perfect in *-sha-m* corresponding to the Greek in *-σα*: thus, from *pach-* (*πέπτω*, *coquere*) we have the aorist *apâksham*, from *srîp-* (*έρπειν*, *serpere*) we have the aorist *asarpsam*. We should of course expect to find a corresponding future in *-sha-mi*; but the Sanscrit future always inserts an *i*, which, according to the laws of euphony, becomes *y*; and the future of *pach-* is not *pakshami*, corresponding to *apâksham*, but *pakshyami*, which rather corresponds to the Greek desiderative in *-σειω*. Now it is remarkable that the Sanscrit has an aorist corresponding to this future, in which the radical vowel is not increased as in the other aorist. But this aorist, like the similar Greek aorist in *-σεια*, is very seldom used singly (Wilkins,

Sanscrit Grammar, p. 297), but occurs chiefly as an optative, in conditional sentences; as—*jñānaṁ chéd a-bhavishyat, sukham a-bhavishyat*, “if there were knowledge, there would be happiness” (Wilkins, *Sanscrit Grammar*, p. 655), i. e. εἰ ἐπιστήμη εἴη, καὶ εὐδαιμονία ἂν εἴη. Or sometimes for the sake of greater emphasis, the demonstrative *tadā* will be prefixed to the apodosis in correlation to the conditional relative *yadi*: as *yadi silā kō-mala a-bhavishyat, tadā ṣṛīgālair éva a-bhakshishyat*, “if a stone were soft, in that case it would certainly be eaten up by the jackals.” When, however, the time of speaking only is referred to, the unaugmented form, which is used as the regular future, is invariably employed. Thus, Krishna says (*Bhagavad-Gita*, XVIII. sloka 68):

*ya idaṁ paramaṁ guhyaṁ madbhaktéshvabhīdhāshyati,
bhaktiṁ mayi parāṁ krītvā, māmēvaishyatyasañcayah.*

i. e. *ya idam paramam guhyam mat bhaktéshu abhi-dhāshyati,
bhaktim mayi parām krītvā, mām éva éshyati a-sançayas,*

—“he who shall explain this most excellent mystery to my worshippers, having performed the highest act of worship to me, shall approach me without hesitation.” *Abhi-dhā-shyati*, a compound of the root *dhā-* “to place,” Greek *θε-*, with the preposition *abhi*, Greek *ἐπί* (above, p. 219), and therefore signifying “to place near,” “to lay before,” “to explain,” is the regular future, and is so used independently of any protasis in the *Nalus*, XII. 76, *vistarēṇa abhi-dāshyāmi*, “I will tell you at full length;” *é-shyati* (= *aishyati*) is a similar future of the root *i-*; it occurs in the apodosis to a participle in *Bhag. Git.* IV. 7. The only difference, in fact, between this and the Greek optative is in the use of the augment, which therefore marks the tense of this optative very strongly. The potential or subjunctive, on the other hand, has no augment and is merely formed from the present (next to which it is placed by the Sanscrit grammarians) by the insertion of this desiderative *i*. It is either an optative, as in the *Nalus*, XIII. slok. 28, 29: *yadi paçyēma tām pāpāṁ, avaçyam éva hanyāma*, “could we see that wicked woman we would assuredly kill her;” or a conjunctive, as in *Nal.* XVII. 45: *tad vachas mama āvēdyan, yathā na jānīyad*, “that discourse must be made known to me, lest he discover, &c.” (*ne cognoscat*).

In our own and other languages, in which the moods and tenses are formed by auxiliaries, we find the relation between the future and subjunctive, and the conjunctive and optative, expressed as a relation between present and past time. Thus, future "I will"; subjunctive "I would"; future "I shall"; subjunctive "I should"; conjunctive "I may"; optative "I might"; &c. German future *Ich werde*, subjunctive *Ich würde*; future *Ich soll*, subjunctive *Ich sollte*; conjunctive *Ich möge*, optative *Ich möchte*; &c.

(2) IMPERATIVE AND INFINITIVE.

It may be doubted if the imperative is really entitled to the rank of a distinct mood. The marks which characterize it cannot be considered as modal inflexions, as they affect only the personal termination, which is generally omitted in the second and strengthened in the other persons. It appears natural, that, in issuing a command, a specification of the person immediately addressed should be omitted, and a great emphasis laid on the person to whom the command is meant to apply. This is effected in English and German, by placing the pronoun after the verb, as "give ye," *geben sie*, &c.: or, in the second person singular, by omitting the pronoun altogether, as "give me the book," *sieh da!* A command is expressed in the ancient languages in a precisely analogous manner: in the second person singular, the personal inflexion is frequently omitted, or when expressed, a stronger form is used, as is always the case in the other persons.

The person-endings of the Greek imperative are, in the active voice, as follows;

Second person singular: omitted as in *τύπτε*; -s, as in *θέ-s*, *δό-s*, &c.; -θι, as in *ἵστα-θι*; for this the Laconians used the indicative form -σι, just as *θεός* in the same dialect is written *σίος*: thus we have *ἄττασι* for *ἀνάστηθι*; *κάββασι* for *κατάβηθι*, see Valckn. *ad Adon.* p. 104: and the -θι is changed into -τι when a θ- precedes, as in *τίθε-τι*; for the same reason the -s is turned into -ν when a σ- precedes, as in *τύψο-ν*, for *τύψα-s*, or *τύπ-σα-θι*.

Third person singular: -τω, the longest vowel ω being for emphasis sake, substituted for the short ι of the indicative third person.

Second and third dual and second plural are the same as those in the indicative, the third dual having, however, ω instead of the η , which appears in the secondary forms of that person in the indicative.

The third person plural is either $-\nu\tau\omega-\nu$, or $-\tau\omega\sigma\alpha\nu$: the former appears to be the more genuine; it is the same as the indicative with a lengthening of the vowel, corresponding to that which appears in the third singular. Whether the final $-\nu$ is merely adscititious, or intended to mark more strongly the genitive plural or instrumental case is uncertain. With regard to the form in $-\tau\omega\sigma\alpha\nu$, it seems to have arisen from a mistaken analogy derived from the secondary tenses in the indicative: the ear led to the impression that $\tau\upsilon\pi\tau\acute{\epsilon}\tau\omega-\sigma\alpha\nu$ was a plural formed from the singular like $\acute{\epsilon}\tau\epsilon\tau\acute{\upsilon}\phi\epsilon\iota-\sigma\alpha\nu$ from $\acute{\epsilon}\tau\epsilon-\tau\acute{\upsilon}\phi\epsilon\iota$ —and they did not perceive the compensation-principle in the latter case.

The passive-endings are, in the singular, second person $-\sigma\omicron$, contracted as in the secondary forms of the indicative; third person $-\sigma\theta\omega$; in the dual, second person $-\sigma\theta\omicron\nu$; third person $-\sigma\theta\omega\nu$: in the plural, second person $-\sigma\theta\omicron\nu$; third person $-\sigma\theta\omega\nu$, or $-\sigma\theta\omega\sigma\alpha\nu$. In the first aorist middle the ending of the second person singular is not $-\omega$, as it should be if contracted from $-\alpha-\sigma\omicron$, but $-\alpha\iota$. The neuter aorists in $-\eta\nu$ form their imperative like the ordinary verbs in $-\mu\iota$ in the active voice; of course we have $\tau\acute{\upsilon}\phi\theta\eta\tau\iota$ not $\tau\acute{\upsilon}\phi\theta\eta\theta\iota$, for the reason mentioned before.

The Sanscrit imperative differs from the Greek in having a first person in all three numbers and in both voices. This is also the case in English, though only in poetry and in the plural, as “Leave we the theme”,—“Charge we the foe”. The characteristic of the first person imperative active in Sanscrit is $-ni$ instead of $-mi$. In the case of verbs in $-\acute{a}mi$, the first person imperative differs from the first person present indicative only in the substitution of $-ni$ for $-mi$: in the case of verbs in $-\acute{e}mi$, $-\acute{o}mi$ and $-aumi$, it is formed like the imperfect indicative, by resolution into $-ayani$ and $-avani$. In the middle this is contracted into $\acute{a}i$, by an elision similar to that which transforms the first person indicative *atmanêpadam* from $-m\acute{e}$ into $\acute{e}$. The second person of the imperative active is expressed either by the person-ending $-dhi$ = Greek $-\theta\iota$, occasionally abbreviated into $-hi$, as *brû-hi* “say”; or by the mere

crude form of the verb, as *tanu*, like *δείκνυ* in Greek. The other persons in the active are expressed much in the same way as in the indicative; the third persons singular and plural are *-tu*, *-ntu*, instead of *-ti*, *-nti*, so that they correspond to the Greek *-τω*, *-ντω*. The second person singular *atmanépadam* is *-sva*; the other endings *-tām*, *-mahai*, *-thām*, *-tām*, *-mahai*, *-dhvām*, *-ntām*, present the locative case of the personal pronouns under a very strong form.

The Greek infinitive has the following endings in the active voice. In the more recent authors the infinitive of the verb in *-μι* ends in *-ναι*, preceded by a short vowel in the present tense, as *τι-θέ-ναι*, *ἰ-στιά-ναι*, *δι-δό-ναι*; but by a long vowel or diphthong in the second aorist, as *θεῖ-ναι*, *στῆ-ναι*, *δοῦ-ναι*. The verbs in *-ω* form the infinitive of the present, future, and second aorist in *-ει-ν* or *-εῖ-ν*, of the first aorist in *-αι*, of the perfect in *-έ-ναι*. The passive infinitive of all verbs ended in *-σθαι*, that of the neuter aorists in *-ῆ-ναι*. All infinitives in *-ει-ν* or *-ναι* are written *-μεναι* or *-μεν* in the more ancient authors. For *-ειν* the Æolians and Dorians wrote *-ην*, the Dorians also *-εν*. The Dorians and Æolians also substituted *-ην* for the infinitive ending *-ναι*; and for the contracted verbs in *-άω*, *-οω*, there was an Æolic infinitive in *-ς*, as *γέλαῖς*, *ὑψοῖς*, for *γελᾶν*, *ὑψοῦν* (Buttmann, *Ausführl. Sprl.* § 105, *Anm.* 21).

The Latin language has two active infinitives: the one terminates in *-re* or *-se* (*dic-e-re*, *dic-si-s-se*, *es-se*); the other in *-tum* (*dictu-m*), which, in the modern grammars, is absurdly enough called the supine in *-um*. In the passive, *-er* is subjoined to the former infinitive, thus from *videre* we have *videri-er*; this full form, however, is generally contracted by the omission either of the active termination *-re*, as in *dici-er*, of the last syllable *-er* as in *videri*, of both at once, as in *dici*; the latter infinitive is written *-tu* (*dic-tu*): modern grammars call it the supine in *-u*.

The Sanscrit infinitive is perfectly analogous to the Latin infinitive in *-tum*. Thus the root *çru* (Greek *κλυ-*) “to hear”, makes *çrutas*, “heard”, and *çró-tum*, “to hear”. These infinitives in *-tum* are cases of verbal nouns: another case is the Sanscrit gerund in *-tvá*; thus from *hi-tum*, “to leave”, or, “the leaving”, we have *hi-tvá*, “by the leaving”, = *τῷ λείπειν*.

Those acquainted with Greek syntax are aware that the infinitive is sometimes used to express a command: it will be

remarked too, that there is some resemblance between the third person singular imperative passive and the termination of the passive infinitive. A modern philologist (Gräfe, *das Sanskrit Verbum*, p. 58) has gone so far as to propose, that the first person singular imperative in Sanscrit, as *tisht'h'âni*, and the second person singular first aorist imperative in Greek, as *τύψον*, should be considered as forms of the infinitive in *-vai*: nay more, that the first person plural, as *tish-t'h'âma*, is the same as the infinitive *ιστάμεν* for *ιστάναι*. It would be difficult to convince us that these resemblances are more than accidental, though, as we have shown above, the Latin language presents some analogies which favour the supposition (above, p. 445).

With regard to the similarity between *τυπτέσθω*, &c., and *τύπτεσθαι*, &c., we must explain ourselves at greater length. It is remarkable, that, where *τ* appears in the active person-endings, *-σθ* appears in the passive: thus we have *τύπτε-τ-ον*, *τύπτε-σθον*; *τύπτε-τε*, *τύπτε-σθ-ε*; *τυπτέ-τ-ω*, *τυπτέ-σθ-ω*; &c. At first sight one might be disposed to think that this *σθ*- is merely an arbitrary insertion to mark the passive voice. But this view is overthrown by the appearance of the same combination *-σθ*- in the infinitives, where there is no corresponding *τ* in the active voice. Besides, in some instances, we have seen that the *-σθ* admits of an easy explanation; in fact, merely the imperative third person singular and the infinitives remain unexplained. We must, therefore, seek for some solution in these two cases, and, if a probable and consistent theory suggests itself, we must take it on its own merits, even though it may not harmonize with the account which we have given of the same combination of letters in the dual and plural person-endings.

On examining the passive imperative-endings we find, that, though the second person has generally the same ending as the corresponding person in secondary form of the ordinary suffixes (*τύπτου* for *τύπτεσο*, compare *ἐτύπτου*; *τετυψο* = *τετυπ-σο*, compare *ἐτέτυψο*), the third person always ends in *-θω* or *σθω*, thus *τυπτέ-σθω*, *τετύφ-θω*, though the corresponding secondary form is *-το*; nay more, that the aspirate is even extended to the preceding consonant, though this is not aspirated in the corresponding tense of the indicative; thus *ἐτέτυπτο* imperative *τετύφθω*. We must, therefore, conclude that there is something essential and necessary in this aspiration. Now the only neces-

sary aspiration which we can imagine in such a position, is the syllable $\theta\epsilon$ - or letter θ -, which we have seen used to give a neuter sense to tenses with person-endings of the active form. If this be the θ - here, we must suppose that $\tau\upsilon\pi\tau\acute{\epsilon}\sigma\theta\omega$ stands for $\tau\upsilon\pi\tau\epsilon\theta\acute{\epsilon}\tau\omega$, $\tau\epsilon\tau\acute{\upsilon}\phi\theta\omega$ for $\tau\epsilon\tau\upsilon\pi\epsilon\theta\acute{\epsilon}\tau\omega$, &c., the θ being in the former case changed into σ , and the personal letter τ assimilated into θ , in consequence of the familiarity of the Greek ear with the combination $\sigma\theta$. If any one objects to this, the improbability that the Greeks should have formed the second person imperative analogously to the formation of the same person in the indicative, but have taken an entirely different form for the other persons, it may be answered, that we find in all languages a difference between the second singular and all other persons of the imperative, a difference naturally resulting from the distinction between a command immediately addressed to another and the same command directed to persons not immediately addressed. If the second person singular is expressed at all in the imperative, it is generally a variation of the ordinary indicative ending; more frequently, however, it is not expressed, as in $\tau\acute{\upsilon}\pi\tau\epsilon$ -, $\alpha\mu\alpha$ -. We believe the same is the case with the first aorist middle imperative $\tau\acute{\upsilon}\psi\sigma\alpha\iota$; if this were a contraction of $\tau\acute{\upsilon}\psi\alpha\sigma\omicron$ it would be written $\tau\acute{\upsilon}\psi\omega$, like $\epsilon\tau\acute{\upsilon}\psi\omega$ and $\acute{\iota}\sigma\tau\omega$; it must, therefore, stand for $\tau\acute{\upsilon}\psi\alpha\theta\epsilon$ as the third person $\tau\upsilon\psi\acute{\alpha}\sigma\theta\omega$ stands for $\tau\upsilon\psi\alpha\theta\acute{\epsilon}\tau\omega$.

An examination of the active infinitive endings will show us that there are in fact three, and only three, distinct forms:

- (1) $-\mu\acute{\epsilon}\nu\alpha\iota$, contracted to $-\mu\epsilon\nu$ or $-\mu\epsilon\iota\nu$;
- (2) $-\nu\alpha\iota$, contracted to $-\epsilon\nu$ or $-\epsilon\iota\nu$, or $-\eta\nu$;
- (3) $-s$ or $-is$.

Although the same verb in different ages of the language appears with infinitives in $-\mu\epsilon\nu\alpha\iota$ and $-\epsilon\iota\nu$, we think it erroneous to say that the form in $-\epsilon\iota\nu$ is a contraction of that in $-\mu\acute{\epsilon}\nu\alpha\iota$. These three endings are, we conceive, participial endings, and therefore it is just as possible for a verb to have two of these infinitive endings, as it is for the same verb to exhibit two different forms of the participle.

We will first produce other instances of these endings with an adjective or participial signification.

(1) *-μεναι*. The regular passive participle is invariably formed in *-μενος*. Under the shortened form *μνο-* it also occurs with a participial meaning, as *κρήδε-μνον* “a fillet”, i. e. “that which is bound round the head;” *μέδι-μνος* “that which is measured” (a certain quantity of corn, Latin *modi-us*), *βελε-μνον* “that which is thrown” (a dart); *γυ-μνός*, “stript” (from *ἐκδύω*, Pott, *Etym. Forsch.* II. p. 182); *μέρι-μνα*, “that which is thought of or recollected,” comp. *μερ-μηρ-ίζω*, *μέρ-μερ-ος*, *μάρ-τυρ*, Latin *me-mor* or *mesmor*, Sanscrit root *smr̥*. In Latin we have seen *ama-mini*, *ama-minor*; we have also the participles, *alu-mnus* “reared”; *auctu-mnus* “increased”; *ver-tu-mnus* “turned”; *da-mnum* “given”; *æru-mna* “a load or weight”; not, as Voss thinks, for *αἰρούμενον*, but, as Pott suggests (*Etym. Forsch.* I. p. 279), connected with the Sanscrit root *yas* = *adniti* (because Sanscrit *ayas* = Latin *æs*), so that *æ-ger* is *qui ærumnam gerit*. We have, besides, shortened forms in *-men* corresponding to the Greek infinitives in *-μεν*; thus, from the root *cōl-*, “to raise up” (*cel-sus*, *col-lis*, Greek *κολώνη*, *κέλλειν*, *cul-mus*, *ex-cel-lere*, &c.), we have not only *colu-mna*, but *cul-men*. Bopp (*Annals of Oriental Literature*, p. 52) mentions *dis-cri-men* (which means *quod discernitur*, not, as he says, *quod discernit*), *stra-men* = *quod struitur*, *legu-men* = *quod legitur*, *præfa-men* “what is said at the commencement.” He also compares *car-men* with the Sanscrit *karman* “a deed”, from the root *kr̥* “to make”, and with the Greek *ποίημα*. Other instances are *sû-men* = *quod sugitur*, *volu-men* = *quod volvitur*, *sê-men* = *quod seritur*, &c. The Sanscrit termination *-mâna* frequently makes a participle, which has a middle or active signification, unless preceded by the syllable *-ya*, when it becomes passive.

(2) *-ναι*. This termination has both an active and a passive participial meaning: an active, in such words as *τέχ-νη* (from *τεύχω*), “that which makes,” *τερπ-νός*, “he who pleases,” &c.; a passive, in such words as *τέκ-νον*, “that which is brought forth,” *σκή-νη*, “that which is covered” (comp. *σκή-α*, *σκό-τος*, Sanscrit root *ch'had* “to cover”, Latin *squâ-ma*, *ob-scu-rus*, *scû-tum*, &c.), *ὀρφ-νός* (*ἐρέφω*), *θάλπ-νος*, &c. In Latin we have the same termination with an active meaning in *pæ-na* (Greek *ποι-νή*), “that which atones,” comp. the Sanscrit root *pû-*, “to purify,” *pe(s)-na*, “that which flies” (Greek *πετη-νός*, *πτη-νός*); but in

by far the greater number of cases it has a passive signification, as in *plê-nus*, *sâ-nus*, *reg-num*, *pug-na*, more anciently *puc-na*, (Greek *πυκ-νός*), *dô-num*, *lig-num*, “that which is bound” (a faggot), *vâ-nus* (comp. *vacuus*), *pâ-nis*, *dig-nus*, “what is shown” (*δεικ-*), &c.

(3) *-s* or *-is*. The analogy of the other two terminations *-μεναι*, *-ναι*, shortened to *-μειν* and *-ειν*, would lead us to expect that this ending was originally *-σαι*, an opinion which is confirmed by the distinct *ι*, which is inserted between it and the last vowel of the crude form: thus, we have *γέλαϊς*, not *γελαῖς*, and *γέλαϊς* must be considered as analogous to *τύπτεις*, for *τύπτεισι*, &c. One of the terminations which we have seen used to express the *abstractum verbale*, or action of the verb, is *-σις*, as *πράκ-σις*, *μίμη-σις*, *λήπ-σις*, *φά-σις*, &c.; another, not quite so common, is *-τύς*, as *έδη-τύς*, *έπη-τύς*, *άλη-τύς*, *όρχησ-τύς*, *σωφρονισ-τύς*. These two endings, in *-σις* and *-τύς*, are equivalent in meaning, and the reader who has observed the changes in the second personal pronoun from *tu*, *tva* to *si*, will not be disposed to deny the possibility of their being originally the same in form. It so happens, that the two Latin infinitives are verbals, similarly related to one another; the one ending in *-se* is a case of the Greek verbal in *-σις*; that ending in *-tum* corresponds to the Greek verbal in *-τύς*. We consider the Æolic infinitive in *-σ* or *-is*, as a genuine representative of the former Latin infinitive: every one knows the resemblance of the Æolic dialect to the Latin, and it would have been strange, if the Greek had retained no traces of likeness in an inflexion of so common occurrence as the infinitive mood.

Upon the whole, then, we have no hesitation in asserting that the three forms of the Greek infinitive active were originally *-μεναι*, *-ναι*, and *-σαι* or *-σει*, and that these are the locatives of three verbals. If it be objected that the two former are more generally passive in signification, and that therefore they cannot well express the action of a transitive verb, it may be answered that the participle in *-ndus* in Latin is used more frequently in a passive than in an active signification, and yet the ablative of this participle is used like a case of the active infinitive—thus, *dandus* means “to be given”, but *dando*, “by giving”; other cases may be used in a similar manner, as *ad dandas opes* or *ad dandum opes*. The reason for this is very plain and simple.

In the indefiniteness proper to the infinitive mood, it matters little whether we consider the verb as transitive or intransitive. For instance, what difference is there in our own language between "the thing is doing" or "the thing is being done"? All this would have been seen long ago, if the Greek and Latin infinitives had not lost their case-endings and become mere crude-forms. The consequence of which has been, that, although it is admitted that the Greek infinitive is to all intents and purposes a noun, to be declined by the article, the loss of the final *-ai* has prevented people from discerning its relation to forms which may be declined without articles or prepositions. The Latin infinitive stands in the same predicament, except that as the Romans had other verbals still admitting of inflexion, and had no article to help out the infinitive, its employment as a noun is confined to the general objective or accusative case. As a nominative, it occurs only in later writers who were familiar with the Greek idiom. Supposing that we had not only *pugna* but *pugnamen* and *pugnatus*, we should be able to represent from one root, all forms of the infinitive; *pug-nâ* (πύκ-ναι), *pug-na-mine* (πυκ-να-μέναι), *pug-na-se* = *pug-na-re* (πυκ-νά-σαι), *pug-na-tu* (πυκ-να-τυί), *pug-na-ndo*, *pug-na-tum*, &c., being all different expressions, in the way of cases, of the same idea, "closeness for the sake of fighting."

It is perhaps right to add that the first aorist infinitive active (as τύπ-σαι) is, in our opinion, a representative of the third form of the infinitive, the final *s* having dropt off.

The ending of the Greek infinitive passive we have seen, is invariably -σθαι. This we shall now be able to explain without difficulty. As τύπ-σαι stands for τύπ-σαις or τύπ-σασε, so τύπ-τεσθαι may stand for τυπτέθαις or τυπτέθεσε, the final *-s*, which is omitted in the aorist, being attracted into the place before the *θ*, to which it seems to be drawn by a sort of etymological gravitation.

The *-er*, which makes the Latin infinitive passive, is that mark of the locative which we have seen used as the characteristic of the passive voice in the other moods. And for this reason we consider that forms like *dicier* are not genuine, but that the mark of the active infinitive has been erroneously omitted. The full form (as *vocarier* = *vocasier*, from *vocare* = *vocase*) is perfectly analogous to that of the indicative passive (as *vocatur* from *vocat*).

The Sanscrit gerund in *-tvá* stands between the Latin infinitive *-se* and the Greek verbal in *-τύς*, just as the Sanscrit pronoun *tvám* stands between the Greek *σὺ* and the Latin *tu*.

(3) PARTICIPLES.

Although we have already spoken of the Greek participle in connexion with the adjective, and have endeavoured to explain the principles of its syntactical use (above, p. 381), method requires that we should again consider it in its etymological and syntactical relation to the infinitive mood, and other inflexions of the verb.

The characteristic of the participle active in the present, future, and aorists, is *-nt*, both in Latin and Greek. This appears only in the oblique cases of the masculine and neuters, as *τύπτοντος*, *τιθέντος*, *τύψαντος*, *δεικνύντος*, *amantis*, *docentis*, &c. In the nominative masculine *-ντ* and *-nt* are always abbreviated; the *s*, which is the characteristic of the nominative case, being, however, invariably retained in the older conjugation: thus for *τιθέντ-s* we have *τιθείς*, on the analogy of *εἰς* for *ένς*; but for *τύπτοντ-s* we have *τύπτων*, where the *-s* is absorbed, as in *καλλίων* for *καλλίονς*; for *τύψαντ-s* we have *τύψας*; for *δεικνύντ-s*, *δεικνύς*; for *amants*, *amans*; for *docents*, *docens*; &c. The feminine is formed according to the principles laid down in the last book; and the neuter, by leaving out the nominative *s*; the *t* is necessarily omitted. In Latin we have occasionally a lengthened form of this participle, used as an active participle, though it is generally employed as an equivalent to the Greek verbals in *-τέος*: we conceive that *moribundus*, *amabundus*, *oriundus*, are formed from *mori^(e)ns*, *ama^(e)ns*, *ori^(e)ns*, as *Agrigrigentum*, *Tarentum*, *Buxentum*, &c., are from *Ἀκράγας*, *Τάρας*, *Βύξεις*, &c. (above, p. 339).

The Greek participle of the perfect active ends in *-ώς*, *-νῖα*, *-ός*; *-ότος*, *-νίας*, *-ότος*; &c. The passive participle ends in *-μένος*, as we have said in speaking of the infinitives. The Latin passive participle ends in *-tus*, and the Greeks have a corresponding verbal in *-τος*. The Sanscrit active participle ends in *-nt*, like the Greek and Latin, with the exception of the perfect participle of which the terminations are *-us*, *-ushî*.

We cannot agree with some modern scholars (Pott, *Etymol.*

Forsch. I. p. 92, Giese, *Æol. Dial.* p. 103, Bopp, *Krit. Gramm.* rule 186) in considering the Greek and Sanscrit perfect participles as sprung from the same form with the present. There is no trace throughout of the *n*, which appears so essential to the ordinary participle form, and, though it may be said that there is an appearance of a weaker as well as a stronger form in the declension of the Sanscrit participle, yet this does not go so far as to establish an identity between this participle and one in which the weaker form is consistently employed. It is very probable that the Sanscrit perfect participle contains the Sanscrit ending *-vat*, which we find in *tâ-vat*, “so-much,” *dana-vat*, “rich,” &c. The Greek perfect participle ends in *-Foot*, as appears from the neuter *-Fos* for *-Foot* and the oblique case *-Fót-os*, &c. The nominative masculine in *-ws* is a representative of *-Foots*, the length of the vowel being a compensation for the lost consonants. The feminine in *-vîa* and the lengthened *î* would seem to point at once to the loss of an aspirate or digamma, and of a sibilant, so that this form is perfectly analogous to the Sanscrit. The connexion between this termination *-ót* or *-Foot*, the Sanscrit *-vat*, and the common adjective ending *-kos*, will appear from the following considerations. That *πατρικὸς* and *πατρῶος* are all but synonyms is well known (see Hermann *ad Eurip. Bacch.* 1362, Neumann *ad Aristot. Rerumpubl. Reliquias*, p. 65). Now we find that *πατρυῖός*, *πατρυός*, *πάτρως*, *πατρῶός*, are also nearly synonymous; that these words are merely by-forms, no etymologist will deny. We likewise find *μητρυῖά*, apparently the feminine of *μήτρως*, and *μητρυῖός*; also the adjective *μητρικός*. It appears to us that all these words, as well as the Latin *patruus*, Sanscrit *pitṛīvyas*, belong to the same class as the perfect participles. The feminine termination *-vîa* sometimes occurs in words apparently participles, but evidently not perfects, as *ἀρπυῖαι* (*ἀρπυῖσαι*), *ἀγυῖά* (*ἀγυῖσαι*), *ὄργυια* (*ὀρέγυσα*).

The participle termination in *-nt* owes its origin to the same pronominal stem as the third-person-plural ending in the verb. The forms *τιθέντι*, *τιθένται*, are, as we have seen, mutilated forms of instrumental and locative cases, expressing that the act of placing is produced by, or has reference to, a set of persons or things. There is no reason why these forms should not be inflected through all the cases. If they are so treated we obtain the regular participle *τιθείς* = *τιθέντ-s*, &c. No doubt the same

series of inflexions might be appended to any other person of the verb. Why this is never done is obvious. The participle expresses the action of the verb without any limitation as to person. Such a meaning is conveyed by the form *τιθεντ-*, uninflected. By the addition of different inflexions we confine it to one or other of the meanings "they place," "they are placed," &c., "if he places," &c. The passive participle in *-μενος*, we have already discussed in speaking of the infinitive in *-μεναι*.

It will be inferred, from what we have said, that we consider the participle as ultimately identical with the infinitive. In usage they are different, and the difference consists in this, that the infinitive, originally a participle or verbal noun in the locative case, has, in process of time, lost all traces of its inflexion, and may be considered as the most general and crude form in which the verb can appear—*γενικώτατον καθεστὸς τῶν ἄλλων ῥημάτων*, as Apollonius says (*Syntax*. III. 13, p. 229 Bekk.): whereas the participle, instead of being a particular case, the locative or instrumental, of a verbal form, has received or retained a set of inflexions which constitute it a mixture of adjective and verb. It will be remembered, however, that the participle becomes an adjective only in the same way in which the infinitive, and consequently the participle itself, when not joined to some noun, becomes a substantive, namely, by the syntactical contrivance which we call prefixing the definite article (above, p. 380).

There are adjectives which have the same termination with the active participle, for instance *χαριεῖς* = *χαρίεντ-ς*. These adjectives, however, do not express an action, but a quality, and therefore may be joined to a substantive as an epithet without an article, or even, as we have shown on a former occasion, become to all intents and purposes a substantive. Thus *χαριεῖς ἄνθρωπος* means simply "an agreeable man;" *τιθεῖς ἄνθρωπος*, on the contrary, could not mean "a placing man", or "a man who is in the act of placing", but "a man, when or if he is placing", an hypothesis of some kind of action being implied. In the case, however, when the article is prefixed, the participle and adjective stand on the same footing: *ὁ χαριεῖς ἄνθρωπος* or *ὁ χαριεῖς*, "the agreeable man"; *ὁ τιθεῖς ἄνθρωπος* or *ὁ τιθεῖς*, "the placer". And in this relation the participle and infinitive are identical: *τῷ τιθέναι* and *τῷ τιθέντι* equally signify "by the placing".

It is a theory of Grimm's (*Deutsche Grammatik*, I. p. 1020 foll.), that the Teutonic infinitive was originally declinable, the ordinary form in *-an* being the accusative, which is also used substantively as the nominative, and the forms in *-annes*, *-anne*, &c., representing the genitive and dative respectively. Grimm recognizes the genitive in the new High German forms *meidens*, *fragens*, &c., and the dative in the common infinitives *meiden*, *fragen*, on the analogy of *zeichen* = *signo*, and *regen* = *pluviâ*. He adds (p. 1022) "an unorganic participle in *-nd*, declinable like an adjective, and with a passive signification, has gradually developed itself out of the old *nn* and the preposition *ze* prefixed, by an interchange with *nd*, just as *niemannes* has become *niemandes*: thus we have *ein zu lésender* (*legendus*), *ein zu gébender* (*dandus*). Perhaps there is still time to expel from the language this stiff and unnatural formation." We cannot agree with the great philologist in his disapprobation of this form which seems to us to be confirmed by every analogy. Our English infinitive is the mutilated form of the dative of such a participle or gerund. Thus, in Wickliffe's Bible, we have *thou that art to comynge*, which corresponds to the Anglo-Saxon *þu þe to cumenne eart* (see *Diversions of Purley*, Vol. I. pp. xxxiii. 450, Vol. II. p. 505, Taylor's Edition). Rask says that the present infinitive in Anglo-Saxon is never used with the particle *to* as in modern English, though the gerund always requires *to*, whence he concludes that the gerund is nothing but the dative of the infinitive (*Anglo-Saxon Grammar*, § 400). In our opinion, the infinitive was originally the participle in *-nt*, which became *-nd* in German, while the flexion form of the old Saxon, which inserted *j* before the case-ending, as in *slâpandjes* = *dormientis*, led to the English *-nge* and *ng*. This participle, when used as an infinitive, lost its inflexion, and could only be used as a gerund or case by means of the auxiliary preposition *zu* or *to*. It also suffered mutilation, being deprived of its final *d* in German, and reduced to the crude form of the word in English. The forms in *-nn* are assimilations for which we have many analogies in the Teutonic languages.

The Latin and Sanscrit languages, which have no definite article, and have therefore retained their inflexions longer than the Greek, afford us a direct proof of the view which we have taken of this question. The Latin expresses by cases of the lengthened

participle in *-ndus*, the verbals in *-tum*, *-tu*, those relations, which, in Greek, are generally conveyed by the infinitive with the definite article: Priscian calls all these cases *gerundia*,—*gerundia quoque vel participialia, quum participiorum videntur habere obliquos casus, nec tempora significant, quod alienum est a verbo (legendi, legendo, legendum, lectum, lectu); infinitivi tamen vice funguntur, quod solet apud Græcos articulis conjungi* (p. 808). They had also an infinitive, which, like the Greek, was a mutilated form of the locative of a verbal in *-sis*, but as they had no definite article, they could not treat this as the Greeks did their infinitive; it remains, therefore, as the mere crude form, expressing the action of the verb, and perfectly equivalent to the verbal in *-tum*. The Sanscrit expresses all the relations of gerund and infinitive by verbal-forms in *-tvā*, *-ya*, *-tum*. The last of these is equivalent to the Latin verbal in *-tum*: deprived of its final letter, it may form the first part of a compound word, like any other crude form; thus we have such words as *jē-tu-kāma*, “desirous of vanquishing”, &c. The verbal in *-tvā* is the instrumental case of this. The verbal in *-ya*, which is only formed from roots compounded with prepositions, and has therefore lost its case-ending, owing to the weight of the forms in which it is found, must be considered as the instrumental case of a similar verbal in *-ya*. All these three, then, are verbals formed by means of the second pronominal element, which we have seen of so much use in the formation of abstract nouns. The elements *-tva* and *-ya* are combined to form the future-ending *tav-ya*, which is equivalent in meaning to the Greek verbal in *-τέος* (perhaps *τέφος*), and to one sense of the Latin participle in *-ndus*.

The oblique cases of participles in Greek and Latin and Sanscrit are often used absolutely, that is, they form, in combination with nouns in the same case, a distinct though subordinate sentence without the intervention of any finite verbs. When the third person plural *τιθέντι* stands by itself, we understand it to mean, that an act of placing is going on by the instrumentality of several persons, who are neither ourselves nor those we speak to. When we use this same word as the instrumental case of the participle, we imply hypothetical placing, of which, however, the agent or instrument is some individual. When this individual is expressed in the same case, we understand that a supposi-

tion is made with regard to his placing: and thus Διοδώρῳ τιθέντι or Διοδώρου τιθέντος, τοιαῦτ' ἅττα γένοιτ' ἂν, means "that if Diodorus were to place, certain things would ensue by or out of that action of his". We endeavoured to show, when speaking of the adjective (above, p. 380), that the participle must always be understood in this way when it appears, not as an attributive word or epithet, but as a predicate, that is, when it is unaccompanied by the article. In modern German the predicate, whether adjective or participle, is not only distinguished by the want of the article, but also by mutilation in its inflexions. And here it must be remarked, that the German language possesses a logical advantage over all others; for it not only marks a distinction between the attributive used without the article and the attributive preceded by it—as *gute-r Mensch, der gute- Mensch*,—but also between the epithet in this last case and the predicate—as in *der Mensch is gut* (see Grimm, *Deutsche Grammatik*, IV. p. 577). This is surely the ultimate refinement of a language in a logical or syntactical state. The German and Latin, however, fall short of the Greek in one use of the absolute participle. They rarely express the whole hypothesis by a single participle, in other words, they do not often use the absolute participle or predicate impersonally, but generally and as a rule add the subject. "The German and Latin syntax," says Grimm (IV. p. 894), "generally requires that the subject should be expressed by the side of the absolute participle; the Greek, which is freer and less constrained, allows us to use absolutely the participles of impersonal verbs, whose subject is not defined: e. g. ὕοντος πολλῶ (not πολλοῦ), 'when it was raining hard'; σαλπίζοντος 'as he was sounding the trumpet'. I am not able to adduce a Latin *pluente, ningente, buccinante*, in any such sense; still less a Gothic *rignjandin* or *at rignjandin*, *haúrñjandin* or *at haúrñjandin*, although such absolute constructions are conceivable. Least of all would it be allowable in the dialects, which prefix the indefinite *es* to their impersonal verbs. It was necessary always to subjoin a definite subject to the absolute participle; e. g. in old High German *reganóntin himile*; Gothic *at rignjandin himina*; Latin *cælo pluente*. It is only by way of exception that certain Latin and German formulæ allow the omission of the subject; e. g. *comperto, posito*; new High

German *gesetzt, kaum gesagt, anders ausgedrückt*." When a participle is used absolutely in Sanscrit it generally appears connected with some noun in the locative case, which is the proper inflexion for this construction; the genitive and ablative cases, which are the most common forms in Greek and Latin respectively, seem to owe their employment for this purpose to their having superseded the old locative. The following instance is given by Wilkins (*Sanscrit Grammar*, p. 632):

*mr̥tē pitari, tē vîrâ, vanâd êtya sva mandirañ,
na-chirâd éva vidvâñsô védê dhanushi-cha a-bhavan,*

"their father being dead (locatives), those heroes, having gone (verbal in *-ya*) from the forest to their own abode, after no long time even, became skilled in the *Vêda* and in the bow" (we remark, by the way, that *chira* is the modern form of *jira* from *jara-s*, γῆρας: *ajira-s* is found in the *Rigvêda*: see Lassen's *Antholog. Sanscritica*, p. 97, l. 10, and note 1). It is a remarkable instance of the looseness of the Indian syntax, that the indeclinable verbals in *-ya* and *tvâ*, which are obviously fragments of locatives, may be used absolutely, though the nominative case of the sentence is not the noun to which they refer, either with an active sense, as in the *Hitôpâdêsa*, p. 8, l. 27: *iti uk-tvâ, çanaih çanair upagam-ya, tēna vyâghrēna dhritah sa pânthah achintayat*, "when he (the tiger) had thus spoken, and had come up to him slowly, slowly, the traveller, caught by the tiger, began to reflect",—where *uk-tvâ* and *upagam-ya* refer to *vyâghrēn'a*, the instrumental of *vyâghra-s*, which governs the verb *achintayat*, the nominative being *pântha*,—or with a passive sense, as in *Nalus*, XIV. 17:

krôdhâd-asûyayi-tvâ tañ, rakshâ mé bhavatah krîtâ,

"as I (the serpent) have cursed him in anger, thy preservation has been effected by me." It is unnecessary to dwell upon these Sanscrit forms: the reader who is curious about them will find an abundance of examples in a paper by W. von Humboldt in the *Indische Bibliothek*, Vol. i. p. 133 foll.; Vol. ii. p. 72 foll.

Having thus investigated all the inflexions of person, tense, and mood, which distinguish the verb in the three classical languages of the Indo-Germanic family, we shall, for the sake of the younger student, select an example or paradigm from each

of these languages, in order that the principles of classification which we propose may be more evident. We shall take the Greek language first, because it possesses the most complete system of moods and tenses; then the Sanscrit, which falls short of it in this respect; and, lastly, the Latin, which is the most defective.

In the arrangement of the tenses and moods in the following paradigms, we have adopted the more general division into definite and indefinite tenses, and, making the active voice of the Greek verb the basis of comparison, we have five definite tenses and as many indefinite. The order in which we have taken these tenses is chosen rather from etymological considerations, than from regard to the connexion of past, present, and future time. The first pair of tenses are those which in the common verbs exhibit some artifice for increasing the weight and strength of the form, whether it be by *guna*, by *anusvāra*, by reduplication, or, as in the Greek verb selected, by pronominal adjunct; the second pair presents reduplication, in which it agrees with the first, and also affixes the second pronominal element, generally under the form *ha*, or *ka*; the third pair is formed by the addition of the same element as *sa*; the fourth by its addition as *ya*; and in the fifth we have a combination of the insertions *sa* and *ya*, which form the two preceding sets of tenses. We have given not only the forms which really occur or might occur in classical Greek or Latin, but also those which we infer must have existed in the oldest state of the language. The three roots we have chosen are all analogous in point of meaning, and identical etymologically in the Sanscrit and Latin.

I. Greek root $\tau\upsilon\pi-$; root $\tau\upsilon\pi-$, pronominal suffix $-\tau-$.

(1) Active voice, or, verb with person-endings in the instrumental case.

(a) INDICATIVE MOOD.

1st DEFINITE TENSE (Present Indicative).

Supposed original forms.

τύπ-το-μι

τύπ-τε-σι

τύπ-τε-τι

τύπ-το-μες

τύπ-τε-τες

τύπ-το-ντι

Existing forms.

(τύπτω),

(τύπτεις),

(τύπτει),

.....

(τύπτετον),

(τύπτετον),

(τύπτομεν),

(τύπτετε),

(τύπτουσι(ν)).

1st INDEFINITE TENSE (Imperfect).

ἐ-τύπ-το-μι

ἐ-τύπ-τε-σι

ἐ-τύπ-τε-τι

ἐ-τύπ-το-μες

ἐ-τύπ-τε-τες

ἐ-τύπ-το-ντι

(ἐτυπτον),

(ἐτυπτες),

(ἐτυπτεν),

.....

(ἐτύπτετον),

(ἐτυπτέτην),

(ἐτύπτομεν),

(ἐτύπτετε),

(ἐτυπτον).

2nd DEFINITE TENSE (Perfect).

τετύπ-(^h/_k)α-μι

=τε-τύφα-μι

τετύφα-σι

τετύφα-τι

(τέτυφα),

(τέτυφας),

(τέτυφεν),

.....

(τετύφατον),

(τετύφατον),

(τετύφαμεν),

(τετύφατε),

(τετύφασιν).

τετύφα-μες

τετύφα-τες

τετύφα-ντι

2nd INDEFINITE TENSE (Plus Perfect).

Supposed original forms.

ἐ-τετυφέγα-μι

ἐ-τετυφέγα-σι

ἐ-τετυφέγα-τι

Existing forms.

(ἐτετύφειν),

(ἐτετύφεις),

(ἐτετύφει),

.....

(ἐτετύφειτον),

(ἐτετυφείτην),

ἐ-τετυφέγα-μες

(ἐτετύφειμεν),

ἐ-τετυφέγα-τες

(ἐτετύφειτε),

ἐ-τετυφέγα-ντι

(ἐτετύφεισαν).

3rd DEFINITE TENSE (Future).

τύπ-σο-μι

τύπ-σε-σι

τύπ-σε-τι

(τύψω),

(τύψεις),

(τύψει),

.....

(τύψετον),

(τύψετον),

τύπ-σο-μες

(τύψομεν),

τύπ-σε-τες

(τύψετε),

τύπ-σο-ντι

(τύψουσιν).

3rd INDEFINITE TENSE (Aorist).

ἐ-τύπ-σα-μι

ἐ-τύπ-σα-σι

ἐ-τύπ-σε-τι

(ἐτυψα),

(ἐτυψας),

(ἐτυψεν),

.....

(ἐτύψατον),

(ἐτυψάτην),

ἐ-τύπ-σα-μες

(ἐτύψαμεν),

ἐ-τύπ-σα-τες

(ἐτύψατε),

ἐ-τύπ-σα-ντι

(ἐτυψαν).

(b) CONJUNCTIVE AND OPTATIVE MOODS.

4th DEFINITE TENSE (Present Subjunctive, or Present Desiderative).

Supposed original forms.

Existing forms.

τύπ-τγ-ομι

(τύπτω),

τύπ-τ-γα-σι

(τυπτης),

τύπ-τ-γα-τι

(τύπτῃ),

.....

(τύπτητον),

(τύπτητον),

τύπ-τ-γο-μες

(τύπτωμεν),

τύπ-τ-γα-τες

(τύπτητε),

τύπ-τ-γο-ντι

(τύπτωσιν).

4th INDEFINITE TENSE (Present Optative, or Past Desiderative).

(έ)-τύπ-τ-γο-μι

(τύπτοιμι),

(έ)-τύπ-τ-γα-σι

(τύπτοισι),

(έ)-τύπ-τ-γα-τι

(τύπτοι),

.....

(τύπτοιτον),

(τυπτοίτην),

(έ)-τύπ-τ-γο-μες

(τύπτοιμεν),

(έ)-τύπ-τ-γα-τες

(τύπτοιτε),

(έ)-τύπ-τ-γο-ντι

(τύπτοιεν).

5th DEFINITE TENSE (Desiderative Verb in -σείω).

τύπ-σ-γο-μι

(τυπ-σε-ίω),

&c.

&c.

5th INDEFINITE TENSE (Æolic Aorist Optative).

(έ)-τύπ-σ-γα-μι

(τύπ-σεια),

&c.

&c.

And so on through the other tenses in the later state of the language.

(c) IMPERATIVE.

Direct Command (Present Imperative).

Supposed original forms.

Existing forms.

τύπ-τε-(θι)

(τύπτε),

τυπ-τέ-τω

(τυπτέτω),

.....

(τύπτετον),

(τυπτέτων),

.....

τύπ-τε-τες

(τύπτετε),

τυπ-τό-ντων

(τυπτόντων).

(And so on through the other tenses.)

(d) INFINITIVE.

The mere state or action.

τυπ-τε-μέναι

τυπ-τέ-ναι

(τύπτειν),

or

τύπ-σαι-ς

(τύψαι).

(And similarly in the other tenses.)

(2) Reflexive voice, or verb with person-endings in the locative case.

Two of the tenses of the indicative will be sufficient to show the principle.

1st DEFINITE TENSE (Present).

τύπ-το-μαι

(τύπτομαι),

τύπ-τε-σαι

(τύπτει),

τύπ-τε-ται

(τύπτεται),

..... (τυπτόμεθον),

(τύπτεσθον),

(τύπτεσθον),

τυπ-τό-με-θεν

(τυπτόμεθα),

τύπ-τε-σ-θεν

(τύπτεσθε),

τύπ-το-νται

(τύπτονται).

1st INDEFINITE TENSE (Imperfect).

Supposed original forms.

Existing forms.

ἐ-τυπ-τό-μην

(ἐτυπτόμην),

ἐ-τύπ-τε-σαι

(ἐτύπτου),

-(σην)

(ἐτύπτετο),

ἐ-τυπ-τέ-την

(ἐτυπτόμεθον),

(ἐτύπτεσθον),

(ἐτυπτέσθην),

ἐ-τυπ-τό-με-θεν

(ἐτυπτόμεθα),

ἐ-τύπ-τε-σ-θεν

(ἐτύπτεσθε),

ἐ-τυπ-τό-ντην

(ἐτύπτοντο).

(3) Passive voice, or formations with the element *th-ya*, or *ya*, the person-endings being still in the instrumental case.

1st AORIST or full form.

ἐ-τύφ-θα-μι

(ἐτύφθην),

ἐ-τύφ-θα-σι

(ἐτύφθης),

ἐ-τύφ-θα-τι

(ἐτύφθη),

.....

(ἐτύφθητον),

(ἐτυφθήτην),

ἐ-τύφ-θα-μες

(ἐτύφθημεν),

ἐ-τύφ-θα-τες

(ἐτύφθητε),

ἐ-τύφ-θα-ντι

(ἐτύφθησαν).

2nd AORIST or contracted form.

ἐ-τύπ-γα-μι

(ἐτύπην),

ἐ-τύπ-γα-σι

(ἐτύπης),

ἐ-τύπ-γα-τι

(ἐτύπη),

.....

(ἐτύπητον),

(ἐτυπήτην),

ἐ-τύπ-γα-μες

(ἐτύπημεν),

ἐ-τύπ-γα-τες

(ἐτύπητε),

ἐ-τύπ-γα-ντι

(ἐτύπησαν).

From these are formed futures with person-endings in the locative case *τυφθήσομαι, τυπήσομαι*.

This suffix appears in the imperative mood of the passive voice, apparently with an instrumental suffix: thus we have *τυπτέσθω* for *τυπ-τε-θέ-τω*, &c. In the infinitive, too, we have *τύπτεσθαι* apparently for *τυπτέθαῖς = τυπτεθγᾶσαι*.

The very complete, and indeed superabundant set of inflexions, which this paradigm assigns to the Greek verb, hardly falls to the lot of any single verb in the writings which have come down to us. Like every other copious language, the Greek has more than one word to express our every-day actions, and thus the verbs of very common use generally work together in a sort of co-partnership; one furnishes the aorist, another supplies the future, and so on: the verb signifying "to go, or come", for instance, has made up its tenses from four different roots: present, *έρχομαι*; imperfect, *ἦεν* or *ἦα*; future, *εἶμι*; aorist, *ἦλθον*; perfect, *ἦκω*. The long list of defective verbs, which we find in every Greek grammar, is a proof of the richness, not of the poverty, of the language.

II. Sanscrit root *tud-*.

1st DEFINITE TENSE (Present Indicative).

Parasmaipadam.

tudâ-mi

tuda-si

tuda-ti

tudâ-vas

tuda-thas

tuda-tas

tudâ-mas

tuda-tha

tuda-nti

Atmanêpadam.

tudê (for *tuda-mê*),

tuda-sê,

tuda-tê,

tudâ-vahê,

tudê-thê,

tudê-tê,

tudâ-ma-hê,

tuda-dhvê,

tuda-ntê.

1st INDEFINITE TENSE (Imperfect Indicative).

Parasmaipadam.

*a-tuda-m**a-tuda-s**a-tuda-t**a-tudâ-va**a-tuda-tam**a-tuda-tâm**a-tudâ-ma**a-tuda-ta**a-tuda-n*

Atmanêpadam.

a-tudê (for *a-tuda-mê*),*a-tuda-thâs*,*a-tuda-ta*,*a-tudâ-vahi*,*a-tudê-thâm*,*a-tudê-tâm*,*a-tudâ-ma-hi*,*a-tuda-dhvam*,*a-tuda-nta*.

2nd DEFINITE TENSE (Perfect Indicative).

*tu-tôda(m)**tu-tôd-i-tha**tu-tôda(t)**tu-tud-i-va**tu-tuda-thus**tu-tuda-tus**tu-tudi-ma**tu-tuda(tha)**tu-tudus* (for *tu-tuda-nti*) *tu-tudi-rê* (for *tu-tuda-ntê*).*tu-tudê* (for *tu-tuda-mê*),*tu-tud-i-shê*,*tu-tudê* (for *tu-tuda-tê*),*tu-tud-i-va-hê*,*tu-tudâ-thê*,*tu-tudâ-tê*,*tu-tudi-mâ-hê*,*tu-tudi-dhvê*,

The Plus-Perfect, or corresponding 2nd Indefinite Tense, is wanting.

3rd DEFINITE TENSE (Future Indicative), wanting.

3rd INDEFINITE TENSE (Aorist Indicative).

*a-taut-sa-m**a-taut-sî-s**a-taut-sî-t**a-taut-s-va**a-taut-tam**a-taut-tâm**a-taut-s-ma**a-taut-ta**a-taut-sus**a-tut-si* (for *a-tut-sa-mê*),*a-tut-thâs* (for *a-tut-sa-sê*), and*a-tut-ta*, so on,*a-tut-s-va-hi*,*a-tut-sâ-thâm*,*a-tut-sâ-tâm*,*a-tut-s-ma-hi*,*a-tud-dhvam*,*a-tut-sa-ta*.

It is doubtful whether the potential, which follows, is the 4th DEFINITE TENSE, or the 4th INDEFINITE TENSE deprived of its augment (above p. 489).

Parasmaipadam.

tudê-ya-m

tudê-s

tudê-t

tudê-va

tudê-tam

tudê-tâm

tudê-ma

tudê-ta

tudê-yu-s

Atmanêpadam.

tudê-ya(mê),

tudê-thâs,

tudê-ta,

tudê-va-hi,

tudê-yâ-thâm,

tudê-yâ-tâm,

tudê-ma-hi,

tudê-dhvam,

tudê-van.

5th DEFINITE TENSE (Desiderative in *s-ya-mi*).

tôt-s-ya-mi

tôt-s-ya-si

tôt-s-ya-ti

tôt-s-ya-vas

tôt-s-ya-thas

tôt-s-ya-tas

tôt-s-ya-mas

tôt-s-ya-tha

tôt-s-ya-nti

tôt-s-yê (for tôt-s-ya-mê),

tôt-s-ya-sê,

tôt-s-ya-tê,

tôt-s-ya-va-hê,

tôt-s-yê-thê,

tôt-s-yê-tê,

tôt-s-ya-ma-hê,

tôt-s-ya-dhvê,

tôt-s-ya-ntê.

5th INDEFINITE TENSE (Aorist Optative).

a-tôt-s-yam

a-tôt-s-ya-s

a-tôt-s-ya-t

a-tôt-s-ya-va

a-tôt-s-ya-tam

a-tôt-s-ya-tâm

a-tôt-s-ya-ma

a-tôt-s-ya-ta

a-tôt-s-ya-n(ti)

a-tôt-s-yê (for a-tôt-s-ya-mê),

a-tôt-s-ya-thas,

a-tôt-s-ya-ta,

a-tôt-s-ya-va-hi,

a-tôt-s-yê-tham,

a-tôt-s-yê-tam,

a-tôt-s-ya-ma-hi,

a-tôt-s-ya-dhvam,

a-tôt-s-ya-nta.

IMPERATIVE.

Parasmaipadam.

*tuda-ni**tuda**tuda-tu**tudâ-va**tuda-tam**tuda-tâm**tudâ-ma**tuda-ta**tuda-ntu*

Atamanêpadam.

*tudai,**tuda-sva,**tuda-tâm,**tudâ-ma-hai,**tudê-thâm,**tudê-tâm,**tudâ-ma-hai,**tuda-dhvam,**tuda-ntâm.*

INFINITIVE AND GERUND.

*tuda-tum,**tuda-tvâ.*

The passive is formed from the *Atamanêpadam* by the insertion of *ya*.

III. Latin root *tud-* with *anuscâra*.

1st DEFINITE TENSE (Present Indicative).

Active.

*tu-n-do-(m)**tu-n-di-s**tu-n-di-t**tu-n-di-mus**tu-n-di-tis**tu-n-du-nt*

Passive.

*tu-n-d-or (tundo-mer),**tu-n-de-ris,**tu-n-di-tur,**tu-n-di-mur,**tu-n-di-mini (or, -minor),**tu-n-du-ntur.*

1st INDEFINITE TENSE.

Wanting.

2nd DEFINITE TENSE (Perfect Indicative).

Active.	Passive.
<i>tu-tudi</i>	
<i>tu-tudi-sti</i>	
<i>tu-tudi-t</i>	Wanting.
<i>tu-tudi-mus</i>	
<i>tu-tudi-stis</i>	
<i>tu-tudê-runt.</i>	

3rd DEFINITE TENSE.

<i>(tu-n-de-bo?)</i>	Wanting.
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3rd INDEFINITE TENSE (used as the Imperfect Indicative).

<i>tunde-ba-m</i>	<i>tu-n-de-ba-r</i> (for <i>tu-n-de-ba-mer</i>),
&c.	&c.

4th INDEFINITE TENSE (used under the form *-âm*, *-ês*, &c., as Future Indicative; under the form *-âm*, *-âs*, &c., as Present Subjunctive).

<i>tu-n-dâ-m</i>	<i>tu-n-da-r</i> (for <i>tu-n-da-mer</i>),
<i>tu-n-dâ-s</i> (or <i>-dê-s</i>)	<i>tu-n-da-ris</i> (or <i>dê-ris</i>),
&c.	&c.

4th INDEFINITE TENSE (Imperfect Subjunctive).

<i>tu-n-de-re-m</i>	<i>tu-n-de-re-r</i> (for <i>tu-n-de-re-mer</i>),
<i>tu-n-de-re-s</i>	<i>tu-n-de-rê-ris</i> ,
&c.	&c.

The 5th DEFINITE TENSE would be formed in *-rio*, if it existed in this particular verb.

IMPERATIVE.

Active.

*tu-n-de**tu-n-di-to**tu-n-di-tote**tu-n-du-nto*

Passive.

*tu-n-de-re,**tu-n-di-tor,**tu-n-di-minor,**tu-n-du-ntor.*

INFINITIVE AND GERUND.

*tu-n-de-re**tun-sum,*

&c.

*tu-n-de-ri-er,**tu-n-de-ndus*

&c.

CHAPTER IV.

THE CONJUGATIONS.

THE differences in the verbs of the Indo-Germanic family, which have induced grammarians to divide them into classes called conjugations, are produced entirely by the various methods that have been adopted to give greater strength to the root in the present tense and those dependent upon it. The necessity for this addition to the root has arisen in the wish to create an expression of duration, which, as we have before remarked, is often effected by reduplication only. Other methods of expressing it were brought forward under the head of vocalization (p. 302): as, however, the subject of the Greek conjugations has never been properly treated, we may venture in this place to resume the subject at greater length. It will perhaps conduce to the better understanding of the nature of those changes on which differences of conjugation depend, if we begin by a brief survey of the Sanscrit and German systems.

The Indian grammarians divide their verbal roots into 10 classes or conjugations. They reckon the whole number of roots at 2352, to which they add 44 *Sautra* roots, or those which are taken into the *Sûtrâni* or grammatical rules for the purpose of deriving some few nouns which cannot be traced back to any of the regular verbal roots. The number of the distinct roots in actual use is much less than that which the grammarians give; indeed not above 500 are found in the existing Sanscrit writings. The distinctions of the 10 conjugation classes, which with the exception of the 9th class do not extend beyond the present (indicative, imperative, and optative) and imperfect (indicative), are of two kinds: first vowel changes, *guna* or *anusvâra*; secondly, pronominal additions, *na*, *nu* or *ya*. We shall, therefore, give two classifications of the 10 conjugations; first, according as they have pronominal additions or not; secondly, as they have *guna* or *anusvâra*.

A. I. No pronominal addition.

a. Person-endings joined immediately to the root.

- | | |
|---|---|
| { | 2nd class, 70 roots, as <i>pâ-mi</i> "I rule." |
| | 3rd 20 roots—reduplication, as <i>da-dâ-mi</i> "I give." |
| | 7th 24 roots— <i>anusvâra</i> , as <i>bhi-na-d-mi</i> "I split" (<i>findo</i>). |

β. Person-endings joined to the root by the vowel *a*.

- | | |
|---|--|
| { | 1st class, 1000 roots— <i>guna</i> of root vowel, as <i>bôdhâmi</i> (from <i>budh</i>), "I know." |
| | 6th 130 roots—no <i>guna</i> , as <i>tudâmi</i> (from <i>tud</i> .) |

II. Pronominal addition.

a. *ya* added to the root.

- | | |
|---|---|
| { | 4th class, 130 roots—mostly neuter verbs, as <i>nâç-yâ-mi</i> "I perish." |
| | 10th <i>guna</i> ; mostly causals and derivatives, as <i>mâna-yâ-mi</i> "I honour." |

β. *nu* added to the root.

- | | |
|---|---|
| { | 5th class, 30 roots, <i>guna</i> of suffix, as <i>ap-nô-mi</i> "I obtain." |
| | 8th 10 roots; all except <i>kri</i> "to make" ending in <i>n</i> or <i>ṇ</i> , probably adscititious in the other 9 roots, as <i>ta-nô-mi</i> . |

γ. *na* added to the root.

- 9th class—*guna* of suffix, which becomes *nî* before the heavy endings, as *mṛd*; *mṛd-nâ-mi*, *mṛd-nî-mas*.

B. *a.* Both vowels *guna*'d.

1st and 10th classes, *budha*, *bôdhâmi*; *churi*, *chôrayâmi*.

β. First vowel *guna*'d.

2nd and 3rd classes, *dviça*, *dvêçmi*; *da*, *da-dâmi*.

γ. Second vowel *guna*'d.

4th, 5th, 6th, 8th, 9th classes, *such-yâ-mi*; *apnômi*; *tudâmi*; *tanômi*; *mṛdnâmi*.

δ. *anusvâra*.

7th class, *yuja*, *yunajmi* (*jungo*).

Grimm divides the verb in all the German dialects into two great classes or conjugations distinguished by the form of the

preterite; the first he calls the strong conjugation; it forms the preterite from the root without the addition of any foreign element: the second he terms the weak conjugation; it forms its preterite by the insertion of the lingual *d* (in old High German *t*) between the root and person-ending. Now it appears that the strong form is the original one in all the German dialects, for all derivative verbs are conjugated according to the weak form, the roots which form the basis of the language are confined to the strong verbs, and though a strong verb may in the course of time degenerate into a weak one the converse never takes place. Therefore, for the purpose of comparison, we may safely leave alone the weak form of conjugation. The strong verbs are divided into two classes each consisting of 6 conjugations; the first of these leading subdivisions contains the verbs with reduplicated preterites, the second, those in which the perfect is formed by vocalization only. Two of the reduplicated conjugations (the 5th and 6th) adopt both methods of forming the preterite, and as the vowel is the same in the singular and plural preterite of the 7th conjugation, and as verbs vacillate between this and the reduplicated conjugation, Grimm concludes (I. p. 838) that the 7th must be supposed to have been originally reduplicative with a change of vowel like the 5th and 6th. Grimm (I. p. 840) takes the following instances among others, from the Gothic language; he gives the first singular present indicative; preterite indicative singular; preterite indicative plural; and the participle.

Reduplicated conjugation.

- I. *Salta* (*salio*); *sái-salt*, *sái-saltum*; *saltans*.
- II. *Haita* (*voco*); *hái-háit*, *hái-háitum*; *háitans*.
- III. *Hláupa* (*curro*); *hlái-hláuþ*(?), *hlái-hláuþum*; *hláuþans*.
- IV. *Slépa* (*dormio*); *sái-zlêþ*, *sái-zlêþum*; *slêþans*.

Reduplicated with change of vowel.

- V. *Láia* (*irrideo*); *lái-ló*, *lái-lóum*; *láians*.
- VI. *Grêta* (*ploro*); *gái-grôt*, *gái-grôtum*; *grêtans*.

Change of vowel without reduplication.

- VII. *Fara* (*proficiscor*); *fôr*, *fôrum*; *farans*.
- VIII. *Greipa* (*rapio*); *gráip*, *gripum*; *gripans*.
- IX. *Kiusa* (*eligo*); *káus*, *kusum*; *kusans*.
- X. *Giba* (*do*); *gab*, *gêbum*; *gibans*.
- XI. *Nima* (*sumo*); *nam*, *nênum*; *numans*.
- XII. *Hilpa* (*adjuvo*); *halp*, *hulpum*; *hulpan*s.

The English reader will find the law, according to which Grimm has arranged the six last conjugations, very well stated in a paper in the *Philological Museum* (Vol. II. p. 375 foll.). It will be sufficient for our present purpose to give the scheme of the vowels in all the conjugations in Gothic and old High German (Grimm, I. 837).

GOTHIC.

OLD HIGH GERMAN.

pres. pret. sg. pret. pl. part. pr. pres. pret. sg. pret. pl. part. pr.

I.	<i>a</i>	<i>ái-a</i>	<i>ái-a</i>	<i>a</i>	<i>a</i>	<i>îa</i>	<i>îa</i>	<i>a</i>
II.	<i>ái</i>	<i>ái-ái</i>	<i>ái-ái</i>	<i>ái</i>	<i>ei</i>	<i>îa</i>	<i>îa</i>	<i>ei</i>
III.	<i>áu</i>	<i>ái-áu</i>	<i>ái-áu</i>	<i>áu</i>	<i>ô</i>	<i>îa</i>	<i>îa</i>	<i>ô</i>
IV.	<i>ê</i>	<i>ái-ê</i>	<i>ái-ê</i>	<i>ê</i>	<i>â</i>	<i>îa</i>	<i>îa</i>	<i>â</i>
V.	<i>áu</i>	<i>ái-ô</i>	<i>ái-ô</i>	<i>ái</i>	—	—	—	—
VI.	<i>ê</i>	<i>ái-ô</i>	<i>ái-ô</i>	<i>ê</i>	—	—	—	—
VII.	<i>a</i>	<i>ô</i>	<i>ô</i>	<i>a</i>	<i>a</i>	<i>uo</i>	<i>uo</i>	<i>a</i>
VIII.	<i>ei</i>	<i>ái</i>	<i>i</i>	<i>i</i>	<i>î</i>	<i>ei</i>	<i>i</i>	<i>i</i>
IX.	<i>iu</i>	<i>áu</i>	<i>u</i>	<i>u</i>	<i>io</i>	<i>ô</i>	<i>u</i>	<i>o</i>
X.	<i>i</i>	<i>a</i>	<i>ê</i>	<i>i</i>	<i>ë, i</i>	<i>a</i>	<i>â</i>	<i>ë</i>
XI.	<i>i</i>	<i>a</i>	<i>ê</i>	<i>u</i>	<i>ë, i</i>	<i>a</i>	<i>â</i>	<i>o</i>
XII.	<i>i</i>	<i>a</i>	<i>u</i>	<i>u</i>	<i>i</i>	<i>a</i>	<i>u</i>	<i>u</i>

These strong conjugations include 80 English verbs; the second conjugation, however, has no representative in our language, and

all our verbs have lost the reduplication. All the primitive verbs in the other Teutonic dialects are also formed according to the strong Gothic inflexion. Now if we compare this form of conjugation, which comprises 130 verbs out of the scanty remains of Gothic literature, we shall find that it agrees with the first Sanscrit conjugation, which contains nearly half of the Sanscrit verbal roots. Some few present traces of the fourth Sanscrit conjugation; for instance, in the seventh Gothic conjugation, we have *vahs-ja* (*cresco*), *vahs-ji-th* (*crescit*); preterite *vôhs*, *vôhsum*; participle *vahsans*, corresponding to the old High German and old Saxon *wahsu*, middle High German *wahse*, Anglo-Saxon *vëaxe*, English *wax*. The general analogy between the German strong verbs and the principal Sanscrit conjugation was first pointed out by Bopp: we shall therefore give his remarks on the subject (*Vergl. Gramm.* p. 115). "The *a* which is added to the root in the Gothic verbs, remains unaltered before certain person-endings, while before others it is softened into *i*; thus, *hait-a*, *hait-i-s*, *hait-i-th*; second person dual *hait-a-ts*; plural *hait-a-m*, *haiti-th*, *hait-a-nd*. The root-vowels *i* and *a* are *guna*'d as in Sanscrit, except that the *guna* vowel *a* is here softened to *i*, which, when combined with a radical *i* is contracted into a long *i* (written *ei*); therefore e.g. *keina* (= *kîna* for *kîina*) 'I germinate', from KIN, *biuga*, 'I bend', from BUG, Sanscrit *bhuj*, from which we have the participle *bhugna*. The diphthongs *ai*, *au*, like the Sanscrit *ê*, *ai*, are unsusceptible of *guna*; the same is the case with regard to *ê* = Sanscrit *â* and *a*. The Sanscrit root-vowel *a* has been treated in three different ways in Gothic. It either remains unaltered in those tenses which are affected by conjugation, and, except in the reduplicated forms, is lengthened to *ô* in the preterite: thus e.g. *far-i-th* agrees with *charati*, and *fôr* with *chachâra*. Or, in the second place, the old *a* appears under the weaker form *i* in the conjugation-tenses, but is retained in the monosyllabic singular of the preterite, so that the stronger *a* is here opposed to the weaker *i*, just as in the first case the *ô* = Sanscrit *â* is opposed to the short *a*: thus, the Sanscrit root *ad*, 'to eat', Gothic AT, forms the present *ita*, singular preterite *at*, *as-t*, *at*. Thirdly, the radical *a* is altogether extirpated without leaving any traces, and is replaced by the weaker *i*, which is treated as if it had been an original *i* and appeared in the corresponding Sanscrit forms; that is to say, it is *guna*'d with

i in the conjugation-tenses, and with *a* in the preterite singular, while it is retained unaltered in the preterite plural. To this class belongs KIN (mentioned above), present *keina*, preterite singular *kain*, plural *kin-um*: the corresponding Sanscrit root is *jan* (Greek γέν-); and *greipa*, *graip*, *gripum*, from GRIP, are similarly related to the veda-form *grabh*: on the contrary, *beita*, *bait*, *bitum*, from BIT, have a corresponding *i* in the Sanscrit *bhid*, similarly VIT, Sanscrit *vid*" (above, p. 92, 304). There is, however, a remarkable difference between the strong German verbs and the first Sanscrit conjugation, which Bopp has not noticed; namely, that in the first Sanscrit conjugation, the connecting vowel is *guna*'d as well as the root-vowel, whereas, in the German, the connecting vowel never admits any quantitative modification. There is yet another point which we must not overlook, if we would make a profitable comparison between the German and Sanscrit verb. We have seen that the Sanscrit verb has *guna* as well as reduplication, so that it agrees with the fifth and sixth strong conjugations of the German verb. But when the verb-root consists of a short *a*, between two single consonants, only the first and second persons singular of the preterite are reduplicated, all the other persons being distinguished by a substitution of the diphthong *é = ai* for the long *á*, and the first syllable being thrown off. Thus, from the root *tan* we have preterite first and second person singular *tatána*, second singular *ténitha*, dual *téniva*, *ténathus*, plural *ténatus*, *ténema*, *téna*, *ténus*. Bopp thinks this *i* has arisen from assimilation of the connecting vowels (*Krit. Gramm. der Sanskr. Spr.* p. 224, comp. *Vergl. Gramm.* pp. 40, 64). We do not see how this can be the case, for in the second and third dual, at all events, the connecting vowel is not *i* but *a*. We rather look upon it as a substitution for the augment of the same kind with that which takes place so commonly in Latin, where reduplication is so seldom found: thus, we have *cāpio*, *cēpi*; *vēnio*, *vēni*, &c. That these are substitutions for a lost reduplication, may be inferred from a comparison of *pepigi* with *compēgi*, of *fūgi* with *πέφενγα*, &c. With regard to the distinction of the first and third singular in the Sanscrit preterite from the other persons, Grimm has aptly compared the old High German and Anglo-Saxon singular, I. *las*, II. *lāsi*, III. *las*; plural, I. *lāsumēs*,

II. *lâsut*, III. *lâsun* (*Deutsche Gramm.* I. p. 1056). From this we infer that the six last of the German strong conjugations were either originally reduplicated like the six first, or that the strengthening of the vowel is to be considered as perfectly identical with reduplication, as we shall see it is in Greek.

In the ordinary Greek grammars the conjugations of the verbs are divided into three classes; (1) those of the *barytone* verbs, or of those which never admit an accent on the ending of the present; (2) those of the contracted verbs in *-έω*, *-άω*, and *-όω*; and (3) those of the verbs in *-μι*. This classification is not scientific; it is only *primâ facie*, and should therefore be abolished as soon as possible. We have before shown that all verbs originally agreed in their person-endings with those in *-μι*, as well from other reasons, as from the fact that those which are still so conjugated express the most elementary notions, and, therefore, must be considered as the oldest verbs. It is true that the Greek verbs in *-μι* are distinguished from the other verbs by certain peculiarities, but they should be classed according to these peculiarities, and not be discriminated from the rest of the verbs merely because they have their person-endings preserved in a more primitive form. The proper method of arranging the Greek verbs is that which is adopted in the Sanscrit and Teutonic grammars: namely, according to the different modes of strengthening the form of the present and other principal tenses. We cannot divide the Greek conjugations into *strong* and *weak* forms, in the same way as the Gothic: for, in the first place, all Greek verbs form the preterite by reduplication, whereas this is confined to the strong form in Gothic: and, conversely, all verbs form certain tenses by the addition of a foreign element, which is the indication of the weak form in Gothic. We may, however, say, that, in case the lengthened form of the present is a consequence of its being a derivative or secondary verb, it cannot form any of its tenses by an alteration of the quality or quantity of the root-vowel, but must have recourse either to reduplication, addition, or both; and in this way it may be said that derivative or secondary verbs in Greek are weaker forms.

One of the great mistakes which grammarians have committed in this department is, that they have considered the present tense

of *barytone* verbs as the primitive form of the root, and the other tenses as derived from it. The consequence of this has been to load our dictionaries and lists of defective verbs with an infinitude of so-called obsolete forms, from which, forsooth, these tenses were derived. The fact is, that the present tense of a *barytone* verb always shows the root under some modification or increase, the genuine root being in most cases preserved in the so-called second aorist. We proceed to classify the verbs according to the various methods by which this corroboration of the present is effected. And let us take (I) the primitive verbs; (II) the derivative verbs.

I. (1) The simplest and apparently the oldest modification, is that by which the root is immediately connected with the ending, the vowel being generally *guna*'d, and the initial consonant reduplicated, when the root begins with a consonant. To this form belong the first three conjugations of the verbs in *-μι*. There are cases in which we find reduplication without *guna*, as in *πίπτω* for *πι-πέτω*: in others *guna* without reduplication, as in *φη-μί*; in others the roots are joined to the ending without any change, as in *εἰ-μί*, *έσ-μί*, and in some we find *anuvâra* of the reduplication, as in *πί-μ-πλημι*. All these verbs may be compared with the second and third Sanscrit conjugations.

(2) A very large class adds to the root the pronominal syllable (second element) *ια* = Sanscrit *ya*. These correspond, therefore, to the fourth and tenth Sanscrit conjugations. In Greek, however, the addition is absorbed, and represented only by a variety of assimilations, as is often the case when the same syllable is used for the purpose of forming a comparative degree. The following are the transformations under which this adjunct appears in the verb conjugation.

a. When the verb root ends in a liquid, the *ι* is frequently placed before the liquid, according to a principle before laid down, that the liquid sounds its adjacent vowel indifferently before or after; thus from the root *σπαρ-* we have *σπείρω* for *σπάργαμι*, from *φαν*, *φαίνω* for *φάνγαμι*, &c. Or the liquid is doubled, thus from *ψαλ*, we have *ψάλλω* from *ψάλγαμι*, like *ἄλλος* for *ἄλιος*, &c., and from *καρ*, we have both *κέρρω* and *κείρω*, from

φθαρ, both φθέρρω and φθείρω, and so forth. Or a short ι in the root coalesces with the ι of the adjunct and becomes long; thus from κρίν, we have κρίνω = κρίνυαμι.

β. When the root ends in γ, κ, χ, or in δ, τ, θ, this pronominal adjunct is represented, as when it appears under the same circumstances in comparatives, by ζ, σσ, or ττ, of which we conclude ζ is always the primitive change. We have seen that ζ is equivalent to γι, κι, χι, and also to δι, θι, τι, all these combinations when placed before α, being pronounced as the French *ja*, or our *sha*: now ζ also = σδ, and when the δ is assimilated to the σ, this = σσ, when σ is assimilated to δ, ζ becomes δδ in Doric, and ττ in other dialects. A few instances will make this clear. From the root κραγ- we have present indicative κράζω = κράγγαμι, from πραγ- we have πράσσω = πράζω = πράγγαμι (compare μέσσω = μέζω = μεγίω); from φρικ-, we have φρίσσω = φρίζω = φρίκγαμι (compare μάσσω = μακίω); from βηχ-, we have βήσσω = βήχγαμι (compare ἐλάσσω = ελαχίω); from φραδ-, we have φράζω = φράδγαμι, from κορυθ-, κορύσσω = κορύθγαμι, and from λιτ-, we have λίσσομαι = λίτγομαι (compare κρέσσω or κρείσσω = κρατίω).

γ. The adjunct γα also appears to be contained in the verbs in -εω, -αω. With regard to the latter, which often appear as verbs in -η-μι, little need be said, as we have already shown in more than one instance that the sound γα is included in η. We have also had examples of the substitution of ε for γ in the middle of a word: that this is its use in the case of the verbs in -εω appears from the Boeotian forms ἀγωνοθετίοντος, εἰλαρχιόντων, θιοπροπίοντος, χοραγίοντες, &c.; for ἀγωνοθετγόντος, or in common Greek ἀγωνοθετοῦντες, &c. (Böckh *Corpus Inscript.* I. p. 720).

(3). Another pronominal adjunct is the element τ or ν, which, we have seen, are identical, the former being added to roots ending in β, π, φ, or κ, the first and third of which are, of course, in this combination, changed to π, and the liquid ν being adopted for roots which end with the liquid μ, or with the dental τ. We sometimes also find ν after -κ. Thus from the roots κρυβ-, τυπ-, ῥαφ-, and τεκ-, we have κρύπ-τ-ω, τύπ-τ-ω, ῥάπ-τω,

τίκ-τ-ω; ταμ-, πετ-, and δακ-, make τέμ-ν-ω, πίτ-ν-ω, and δάκ-ν-ω. This ν is also added to vowel roots, as in πί-ν-ω. It appears also under the longer form νη, as in the 9th Sanscrit conjugation, in δάμ-νη-μι, &c.; under the form -νν, as in the 5th Sanscrit conjugation, in ζεύγ-νν-μι (root ζυγ-, already strengthened by *guna*), &c., and in this form the ν is often doubled, as in σβέ-ν-νν-μι, χρώ-ν-ννμι, σκεδά-ν-ννμι, &c. (above p. 298), and sometimes under the ordinary short form it is added to a root already strengthened by *anuvāra*, as in λα-μ-βά-ν-ω, root λαβ-, κι-γ-χά-ν-ω (also written κιχᾶνω), root κιχ-, λι-μ-πάν-ω (also written with a simple *guna*, as λείπω), root λιπ-. The change from ικᾶνω to ικ-νέ-ομαι is in accordance with the general principle with regard to liquids, already so often mentioned.

There is one verb, with regard to which it may seem doubtful whether there is an insertion of this τ- or not. We allude to the Attic διοπτρεύω, in the signification, “to be the δίοπος, or purser of a ship”—“one who sailed in her as manager,” also called the ἐπίπλους. The following are the passages in the Grammarians referring to it. Harpocration: διοπτρεύων, Δημοσθένης ἐν τῷ εἰς τὴν Λακρίτον. δίοπος λέγεται νεὼς ὁ διέπων καὶ ἐποπτεύων τὰ κατὰ τὴν ναῦν, ὁ καθ’ ἡμᾶς λεγόμενος ἐπίπλους. Hesychius: δίοποι. ἐπιμεληταί.—ἀδίοπον. ἄναρχον καὶ ἀφύλακτον. Αἰσχύλος, Φρύξιν. δίοποι γὰρ οἱ τῆς νεὼς φύλακες. Ælius Dionysius: δίοπος ὁ ναυφύλαξ ὡς ἐπισκοπῶν αὐτὴν καὶ ἐφορῶν ἀπὸ τοῦ ὅπτω. Erotianus: διόπω, τῷ πῆς νηὸς ἐπιμελητῇ. παρὰ τὸ διοπτρεύειν. Ἀττικὴ δὲ ἡ λέξις κειμένη καὶ παρ’ Ἀριστοφάνει ἐν Ἀττικαῖς λέξεσι καὶ παρ’ Αἰσχύλῳ ἐν Σισύφῳ καὶ Εὐριπίδῃ ἐν Ἰππολύτῳ. It is quite clear that the connexion of δίοπος with ὅπτομαι is merely a fancy of the Grammarians. As a political term δίοπος is naturally and immediately connected with διέπω, the use of which is quite in accordance with that of its derivative. Thus, as we have βασιλῆς δίοποι of two generals in Æschylus (*Pers.* 44), we have also in the same play (v. 108), πολέμους πυργοδαίκτους διέπειν; and Pindar (according to Strabo, p. 544. B) φησιν ὅτι αἱ Ἀμάζονες

Σύριον εὐρναίχμαν διεῖπον στρατόν.

Now there is, no doubt, a word διόπτης or διοπτήρ, which

is connected with ὄπτομαι, and means “a spy,” as in Homer, *Iliad* X. 582 :

τόν ῥα διοπτῆρα στρατοῦ ἔμμεναι ἡμετέροιο
Ἐκτωρ τε προέηκε καὶ ἄλλοι Τρῶες ἀγανοί.

where διοπτῆρ στρατοῦ is a very different person from ὁ δίοπος στρατοῦ, and from this δίοπτης we have a verb διοπτεύω, “to be a spy,” as in Hom. *Iliad* x. 451 :

ἦ τε καὶ ὕστερον εἰσθα θοὰς ἐπὶ νῆας Ἀχαιῶν,
ἥ ἐ διοπτεύσων, ἥ ἐναντίβιον πολεμίζων.

In Sophocl. *Ajax*. 307 : καὶ πλήρες ἄτης ὡς διοπτεύει στέγος : it means simply “to perceive,” just as we use the verb “to espy.” There would, therefore, be some ambiguity if διοπτεύω were also formed from δίοπος. And as διοπτεύων in Demosthen. *Lacrit.* p. 929 : Ἰππίας Ἀθηνίππου Ἀλικαρνασσεὺς μαρτυρεῖ συμπλεῖν ἐν τῇ Ὑβλησίου νηὶ διοπτεύων τὴν ναῦν, does appear to be connected with δίοπος and not with δίοπτης, it would be better, we think, to suppose that the τ has got in, in consequence of the false etymology which the Grammarians have adopted, and therefore to read διοπεύων.

(4) The two pronominal insertions θ- and σκ-, which we have seen performing such important functions in the tenses and voices of the verb, also appear as corroborators of the present tense, though generally with a distinct meaning ; thus from the root εδ- we have ἐσ-θί-ω, from φα-, φά-σκω, &c. These additions often affect the final consonant of the root, as in πάσχω from παθ, the κ being aspirated and the θ lost in the similar sound of the σ ; so also we have δίσκος from δικ ; and the word ἴσκε (*Odyss.* xix. 203. xxii. 31), which clearly means “he said” (*Buttmann, Lexil.* II. p. 83), is to be considered as a similar contraction from **Ἰπ-σκε** = **εἶπεσκε**, the root being **Ἰεπ**, Sanscrit *vach*, Latin *voc* : a converse contraction has taken place in ἐνισπον for ἐνιπ-σκον : ἴσχειν, σχεῖν from ἔχεσκον are more analogous to πάσχω (see above, p. 298).

(5) The remaining method of strengthening the present indicative is by simple *guna*, which, as we have seen, consists in placing ε before the root vowel. This method is only applicable to those verbs in which the root-vowel is ι or υ :

instances are, however, sufficiently numerous; thus, from the root $\sigma\tau\iota\beta$ -, we have $\sigma\tau\epsilon\acute{\iota}\beta\omega$, from $\phi\nu\gamma$ -, $\phi\epsilon\acute{\upsilon}\gamma\omega$; from $\lambda\iota\pi$ -, $\lambda\epsilon\acute{\iota}\pi\omega$; from $\lambda\iota\chi$ -, $\lambda\epsilon\acute{\iota}\chi\omega$; from $\pi\iota\theta$ -, $\pi\epsilon\acute{\iota}\theta\omega$; from $\tau\nu\chi$ -, $\tau\epsilon\acute{\upsilon}\chi\omicron\mu\alpha\iota$, also, with *anusvāra* and ν - adjunct, $\tau\nu\gamma\chi\acute{\alpha}\nu\omega$; from $\lambda\iota\beta$ -, $\lambda\epsilon\acute{\iota}\beta\omega$; from $\pi\nu\theta$ -, $\pi\epsilon\acute{\upsilon}\theta\omicron\mu\alpha\iota$, &c.

II. The derivative verbs are formed from their primitives by the addition of elements, some of which are used also for the mere purpose of strengthening the present tense in the primitives, from which, however, they are distinguished by the way in which these endings are joined to the crude form, and by their possessing only those of the secondary tenses which can be constructed by extrinsic addition, namely, first aorist active and passive and a perfect active in $-\kappa\alpha$. The terminations are $-\acute{\epsilon}\omega$, $-\acute{\alpha}\omega$, $-\acute{\omicron}\omega$, $-\acute{\alpha}\zeta\omega$, $-\acute{\iota}\zeta\omega$, $-\acute{\iota}\sigma\kappa\omega$, $-\acute{\epsilon}\upsilon\omega$, $-\acute{\alpha}\acute{\iota}\nu\omega$, $-\acute{\upsilon}\nu\omega$; as $\phi\iota\lambda\acute{\epsilon}\omega$ from $\phi\acute{\iota}\lambda\omicron\varsigma$, $\tau\iota\mu\acute{\alpha}\omega$ from $\tau\iota\mu\acute{\eta}$, $\mu\iota\sigma\theta\acute{\omicron}\omega$ from $\mu\acute{\iota}\sigma\theta\omicron\varsigma$, $\sigma\kappa\epsilon\upsilon\acute{\alpha}\zeta\omega$ from $\sigma\kappa\epsilon\upsilon\acute{\eta}$, $\nu\omicron\mu\acute{\iota}\zeta\omega$ from $\nu\acute{\omicron}\mu\omicron\varsigma$, $\gamma\alpha\mu\acute{\iota}\sigma\kappa\omega$ from $\gamma\acute{\alpha}\mu\omicron\varsigma$, $\pi\alpha\iota\delta\acute{\epsilon}\omega$ from $\pi\alpha\acute{\iota}\varsigma$ ($\pi\alpha\acute{\iota}\delta\varsigma$), $\sigma\eta\mu\acute{\alpha}\acute{\iota}\nu\omega$ from $\sigma\acute{\eta}\mu\alpha$, $\epsilon\acute{\upsilon}\theta\acute{\upsilon}\nu\omega$ from $\epsilon\acute{\upsilon}\theta\acute{\upsilon}\varsigma$; the termination $-\epsilon\theta\omega$, $\acute{\upsilon}\theta\omega$, seems to be appropriated to derivatives from simple verbs, for instance, $\phi\lambda\epsilon\gamma\acute{\epsilon}\theta\omega$ from $\phi\lambda\acute{\epsilon}\gamma\omega$, $\phi\theta\iota\nu\acute{\upsilon}\theta\omega$ from $\phi\theta\acute{\iota}\nu\omega$: the ν in the latter case is due to the $\nu\nu$, which seems to be added to the root $\phi\theta\iota$ -, to form the present tense. The termination $\iota\sigma\kappa$ -, $\upsilon\sigma\kappa$ -, is inserted between the root and the strengthening pronominal adjunct ν - in the verbs $\acute{\omicron}\phi\lambda\iota\sigma\kappa\acute{\alpha}\nu\omega$, $\acute{\alpha}\lambda\upsilon\sigma\kappa\acute{\alpha}\nu\omega$, $\acute{\alpha}\mu\beta\lambda\iota\sigma\kappa\acute{\alpha}\nu\omega$. The common verb $\alpha\acute{\iota}\nu\acute{\epsilon}\omega$ merits particular consideration, even after what Buttmann has written about it (*Lexil.* II. p. 112, foll.). There can be no doubt that the simplest form of the verb was $\alpha\acute{\iota}\nu\omega$, as Hesychius tells us: $\alpha\acute{\iota}\nu\omega\nu$. $\beta\alpha\rho\nu\tau\acute{\omicron}\nu\omega\varsigma$, $\acute{\epsilon}\pi\alpha\iota\nu\acute{\omega}\nu$ $\tau\iota$. From this was formed the substantive $\alpha\acute{\iota}\nu\omicron\varsigma$, and from it the derivative verb $\alpha\acute{\iota}\nu\acute{\epsilon}\omega$, and the derivative noun $\alpha\acute{\iota}\nu\eta = \alpha\acute{\iota}\nu\gamma\alpha$ (Herodot. III. 74). The primary signification of $\alpha\acute{\iota}\nu\omega$ is, "to say" or "declare", and the meaning of $\alpha\acute{\iota}\nu\omicron\varsigma$ in Homer is, "a speech" or "narrative." From this came the sense of "praise" "commendation," just as the Latin *laudare* is connected with *laut*, *loud*. That the verb is formed with the pronominal suffix ν -, and that its root is $\alpha\iota$ - is proved by the comparison of $\alpha\acute{\iota}\nu\omega$ with $\alpha\acute{\iota}\omicron$, and of $\alpha\acute{\iota}\sigma\alpha$ with *fa-tum*, which Buttmann has suggested. We also recognize the root in $\acute{\eta}\mu\iota$ "I say", and in the Sanscrit *āha* "I said". In these two last forms the guttural semi-vowel is ab-

sorbed; it is transposed in *αι-*, according to the rule, and perhaps represents the digamma, the labial element of which appears in *φη-μί*, for, according to Thiersch, *αἴνη* is a digammated word. As the derivative *αἰνέω* bears the secondary sense of “to praise,” “to extol”, we might, perhaps, change the accent, and read *αἴνω*, *αἴνεις*, in those passages of Æschylus where the general and primary meaning is conveyed: thus, in the *Agamemnon*, 1460, we have,—

ἦ μέγαν οἴκοις τοῖσδε
δαίμονα καὶ βαρύμηνιν αἰνεῖς.
φεῦ, φεῦ! κακὸν αἶνον ἀτη-
ρᾶς τύχας ἀκορέστου.

i. e. “you mention a divinity who has exerted great influence upon this family, and has manifested his heavy indignation against it—an ill-boding mention of misfortunes ever new” (for the force of *ἀκόρεστος* see above, p. 414); and in the *Choëph.* 1000, we have:

φόνου δὲ κηκὶς ξὺν χρόνῳ ξυμβάλλεται,
πολλὰς βαφὰς φθείρουσα τοῦ ποικίλματος—
νῦν αὐτὸν (scil. τὸν φόνον) αἰνῶ, νῦν ἀποιμῶζω παρῶν,
πατροκτόνον θ' ὕφασμα προσφωνῶν τόδε.

In the case of primitive words the terminations are joined immediately to some root, even though the contact may absorb the final consonant of the root, but in these derivatives the endings are always affixed to some crude-form, and therefore, of necessity, a vowel is inserted between the root and the termination. This enables us to explain, why verbs, made up of a noun, or the *ἀ-* privative, or *δυσ-*, or *εὖ*, and a verbal root, are generally formed in *-έ-ω*. The fact is, that while such verbs as *ἀπο-δίδωμι*, *συν-τρέχειν*, *παρα-λαμβάνειν*, &c., are in fact separable compounds, as is shown by the frequent tmesis in the older writers, all compound nouns, whether made up of prepositions, or of nouns, or of *ἀ-*, *δυσ-*, or *εὖ*, and verbal roots, are actually melted down into individual words incapable of division, and it is from these compound nouns that the verbs in question are formed; therefore they are derivative verbs, and the length of the word would generally induce a necessity for the shortest kind of derivation which is in *-έ-ω*. If a Greek had wished to express the idea of conferring a benefit on any

one, or of co-operating with him in a particular action, he would say εὖ ποιεῖν, συν-έρδειν, but if he wished to express habitual benefaction or habitual co-operation, he would take the compound nouns εὖ-εργέτη-ς and σύν-εργο-ς, and make derivative verbs from them—εὖ-εργετ-έ-ω “to be a benefactor,” and συν-εργ-έ-ω “to be a co-operator.” It will be observed that we have precisely the same phenomenon in Latin; from *facere*, an uncontracted verb, we have the compound noun *læti-ficus*, and from this the derivative or contract verb *læti-ficâre*, so from *gerere* we have *belli-ger*, and from this *belli-gerâre*. With regard to the Greek verbs it seems very strange that even modern scholars should talk of deriving them from the second perfect of the barytone verbs, the roots of which they contain (see Erfurdt *ad Soph. Antig.* 56. Lobeck *ad Phrynich.* p. 580), especially after Scaliger had, with his usual penetration, discovered the truth. *Nemo Hellenismi paullo peritior*, says that great scholar (*Phrynich.* p. 266 Lobeck), *concedet*, εὐαγγέλλω *græcum esse. Nam τὸ εὖ καὶ τα στερητικὰ μόρια non componuntur cum verbis, sed cum nominibus. Itaque εὐάγγελος recte dicitur, unde verbum εὐαγγελέω, non εὐαγγέλλω quod est absurdissimum.* But although in general the weight of the compound nouns recommended the shortest form of derivation for the verb, there is no absolute reason why one of the other derivative forms should not be occasionally adopted, when there was any particular reason for the preference. Such a reason seems to exist for the assumption of ἀτιμάζω instead of ἀτιμέω; for, τιμάω being itself a derivative, a similar derivative would hardly point to the distinction of τιμή and ἄτιμος. The word ἀτίει which occurs in Theognis (621) is justified by the opposition to τίει:

πᾶς τις πλούσιον ἄνδρα τίει, ἀτίει δὲ πενιχρόν.

The word χερνίπτεσθαι is probably derived from χέρνιψ considered as a simple word, like χαλέπτω from χαλεπός (Buttmann, *Ausführl. Sprl.* §. 121): δυσθνήσκων, which occurs twice in Euripides, is used only as an epithet or adjective, and σταδιοδραμοῦμαι, which is found in the same poet (*Herc. fur.* 863) should perhaps be written σταδιοδρομήσω: for σταδιοδρομέω actually occurs, and it is not unlikely that an ignorant copyist, knowing by habit that δραμοῦμαι was the future of τρέχω, has barbarized the word into the form in which it appears. Some of the other instances

in which this rule seems to be violated have been successfully corrected by modern scholars.

Having now shown by what increments of addition or insertion the present may be strengthened, we proceed to point out the relation which subsists between the root vowel and that which appears as its *locum tenens* in the present tense. This subject has been already touched on in the chapter on the roots: it will, therefore, be sufficient in this place to give instances of the change of vowel in the Greek verb according to an arrangement first pointed out by Pott (*Etymol. Forsch.* I. p. 11 foll.). This scholar has divided the Greek verbs into 4 classes according to the affections of the root vowel in the leading tenses; (1) the root preserves the same vowel throughout all the inflexions; (2) the quality of the vowel is altered; (3) its quantity is altered, generally by doubling; (4) it is *guna'd*. The second aorist active, middle and passive, generally exhibits the root, and the principal changes are those of the second perfect, or noun containing the verbal root which agrees with the second perfect, and the present. The reason for the change of vowel in (2) (3) (4) is, as we have seen, the greater weight of the perfect and present in consequence of the methods adopted for strengthening them. The present is generally a heavier form than the perfect or derivative noun, and, therefore, has the lighter vowel. It will be observed that there are some verbs, placed by Pott in the 3rd class, which are cases of *guna*: to prevent mistakes we have always stated the method of corroboration adopted in the particular case.

(1) This class is very numerous, as it contains all the weak or derivative verbs, many of which have already received a vowel modification in their crude form. Thus from the root $\pi\epsilon\nu$, we have $\pi\acute{o}\nu\omicron\varsigma$ and from this $\pi\omicron\nu\acute{\epsilon}\omega$, in which the first vowel remains unaltered through all tenses. The most obvious instance of the primitive verbs of this class is second aorist $\acute{\epsilon}\text{-}\tau\nu\pi\text{-}\omicron\nu$, second perfect $\tau\acute{\epsilon}\text{-}\tau\nu\pi\text{-}\alpha$, verbal substantive $\kappa\text{-}\tau\acute{\upsilon}\pi\text{-}\omicron\varsigma$, present $\tau\acute{\upsilon}\pi\text{-}\tau\text{-}\omega$.

(2) In this class are included verbs with a primitive α (or $\check{a}\rho = r$ Sanscrit) changed into $\omicron$ and ϵ in the strong tenses. It agrees with the 11th and 12th of the strong German conjugations, in which the root vowel is followed by a liquid, or a mute and liquid, or preceded by a liquid (conj. 11), or followed by a liquid and mute, or a double liquid (conj. 12). This class

is separated by Pott into 4 subdivisions, the second and third of which we consider identical.

A. Roots ending in a liquid.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἐ-στάλ-ην	στόλο-ς	στέλλω (adjunct ια),
ἐβαλ-ον	{βε-βόλ-η-μαι } {βολή }	βάλλω (id.),
ἐ-ταμ-ον	τόμο-ς	τέμ-ν-ω (adjunct ν),
καν-εῖν	κονή Hesych.	καίνω (adj. ια),
ἐ-πταρ-ον	πτόρο-ς	πταρ-νυ-μαι (adj. νυ),
ἐ-φθάρ-ην	ἐ-φθορ-α	πταιρω (adj. ια),
ἐ-σπάρ-ην	{ἐσπορ-α } {σπορή }	φθείρω (id),
ἐ-δάρ-ην	δόρ-α	σπείρω (id),
		δείρω (id).

B. Roots ending in liquid and mute; the liquid of course may shift its place.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἐ-δρακ-ον	δέ-δορκ-α	δέρκ-ο-μαι,
ἐ-παρδ-ον	πέ-πορδ-α	πέρδ-ω,
ἐ-πραθ-ον	πτολί-πορθο-ς	πέρθ-ω,
{ἐ-ταρπ-ό-μην }	{τροφή }	{τέρπω}¹
{ἐ-τράπ-ον }	{τέτροφ-α }	{τρεπω}²
ἐ-τραφ-ον	τέτροφα	τρέφω,
ἐ-κλάπ-ην	κέ-κλοφ-α	κλέπ-τ-ω (adj. τ).

C. Roots without liquids.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
Sanscrit <i>had</i>	κέ-χοδ-α	χέζω (adj. ια),
ἐ-τεκ-ον	τέτοκα	τίκ-τ-ω (adj. τ-),
{ἐ-πεσ-ον }	{ποτ-μό-ς }	{πί-πτ-ω (redupl.) }
{ἐ-πετ-ον }		{πιτ-νέω (adj. νε) }
{Sanscr. <i>pat</i> }		
ἐ-ψέγ-ην	ψόγο-ς	ψέγω.

1. Pott considers τέρπω and τρέπω as belonging to the different classes; we think that they are the same word, and are but slight modifications of τρέφω.

(3) This class comprehends verbs having *a* for their root vowel; this vowel is generally doubled or *guna*'d in the perfect and present, so that these verbs agree with the seventh strong German conjugation.

2nd Aorist.	2nd Perfect.	Present.
ἔ-κραγ-ον	κε-κράγα (<i>guna</i>)	κράζω (adj. ια),
ἔ-κλαγ-ον	{κέ-κληγα (<i>guna</i>) κέ-κλαγγα (<i>anusvāra</i>)}	κλάζω (adj. ια),
ἔ-πάγ-ην	πέ-πηγα (<i>guna</i>)	πήγ-νυμι (adj. νυ),
ἔ-λακ-ον	λέ-λακα (<i>guna</i>)	λάσκω (adj. σκ),
ἔ-τακ-ον	τέ-τηκ-α (<i>guna</i>)	τήκω (<i>guna</i>),
ἔ-λαχ-ον	είληχα (<i>guna</i>)	λαγχάνω (adj. ν, and <i>anusvāra</i>),
ἔ-λαβ-ον	είληφα (<i>guna</i> & affix)	λαμβάνω (adj. ν, and <i>anusvāra</i>),
ἔ-παθ-ον	πέπονθα (<i>anusvāra</i>)	πάσχω (adj. σκ),
ἔ-δακ-ον	δέδηχα (<i>guna</i> & affix)	δακ-ν-ω (adj. ν),
ἔ-φάν-ην	πέφνηα (<i>guna</i>)	φαινω (adj. ια).

Pott subjoins to this class a number of perfects such as πεφρίκα, ἔρριγα, βέβριθα, τέτριγα, &c., aorists such as ἔθιγον, κρίκε, δεκεῖν, ἔκικον, &c., but they are, in our opinion, quite different.

(4) In the last class we find verbs, which have *i* or *υ* for their root vowel, and this is *guna*'d in the present and perfect, the *guna*-vowel being generally changed according to the law observed in class 2. This class corresponds, therefore, to the eighth and ninth strong German conjugations.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἔ-στιχ-ον	στοῖχος	στέιχω,
ἔ-λιπ-ον	λέλοιπα	λείπω,
ἔ-στίβ-ην	στοιβή	στείβω,
λιβά-δ-	λοιβή	λείβω,
ἰδ-εῖν	οἶδα	εἶδω,
ἔ-πιθ-ον	πέποιθα	πείθω,
ἔ-φυγ-ον	πέφευγα	φεύγω,
ἔ-ζυγ-ην	ζεῦγος	ζευγνυμι (adj. νυ, as well as <i>guna</i>),

2nd Aorist. 2nd Perfect or Verbal Noun.

Present.

ἔ-τυχ-ον	τέτευχα	{ τυγχανω (adj. ν, and anuvára) } { τεύχω }
ἐ-πυθ-ό-μην	πευθώ	{ πεύθομαι } { πυνθάνομαι (adj. νο } and anuvára)
Lat. <i>stūd-eo</i>	σπουδή	σπεύδω,
λυγ-ρό-ς	λευγ-α-λέ-ος	<i>lúgeo.</i>

To complete this subject, we add a list of second aorists in which the person-endings are joined immediately to the root without even the intervention of a short vowel, or any other fulcrum beyond *guna* (see Kuhn *De Conjugatione in -μι*, p. 60).

Roots ending in
a Vowel.

2nd Aorist.

άλο-	έάλων, ήλων, άλοίην (άλώην Homer, <i>Iliad</i> xiv. 299), άλῶ, άλῶναι άλούς.
βα-	βί-βας (pres. part.), έβην, έβάτην, βάτην, υπέρ-βασαν, έβαν, βαίην, βῶ, βάμες (<i>Dor.</i>), βήθι, βά in composition.
βλε-	ξυμ-βλήτην, ξυμβλήμεναι, ξύμβλητο, ξύμβληντο, βλείμην, βλείο, βλήται, βλήσθαι, βλημένος.
βρο-	έβρων.
γηρα-	έγήρα, γηράναι, γηράς, γηραντέσσι, γερείς (<i>Ion</i>).
γνο-	έγνων, γνοίην, γνῶ, γνῶθι, γνῶναι, γνούς, συγ-γνοιτο.
δρα-	έδραν, δραίην, δρῶ, δράναι, δράς.
δυ-	έδυν (adj. ια), έκδυίμεν, δύθι, δύναι, δύς.
θυ-	θύμενος.
κλα-	άποκλάς.
κτα-	έκταν, κτέωμεν, κτάμεναι, κτάς, άπέκτατο, κτάσθαι, κτάμενος.
κτι-	έϋκτίμενος.
λυ-	λύτο, λύντο.
πτα-	έζέπτη, άπέπτα, προσέπταν, πταίη, έπτάμην, πτάσθαι, πτάμενος.
πλα-	έπληντο, πληντο, έπλητο, πλείμην, πληῆσο, πλημένος.
πλω-	έπλων, πλώς.

Roots ending in
a Vowel.

2nd Aorist.

πνυ-	ἄμπνύτο.
σβε-	ἔσβην.
σκλα-	ἔσκλην, ἀπέσκλη, ἀποσκλαίη.
συ-	σύτο, σύμενος.
τλα-	ἔτλην, ἔτλαν, τλαίην, τλώ, τλήθι, τλήναι, τλάς.
φθα-	ἔφθην, φθαίην, φθῶ, φθῆναι, φθάς, φθάμενος.
φθι-	ἔφθίμην, φθίτο, φθίμην.
φν-	ἔφυν (adj. ια), φύη, φύω, φύναι, φύς, φούσα (Æol.).
χυ-	χύντω, χύτο, ἔχυτο.

Roots ending in
a Consonant.

2nd Aorist.

ἄρ-	ἄρμενος, ἄρμενα.
ἄλ-	ἄλσο, ἄλτο, ἄλμενος.
γεν-	ἔγεντο (γίγνομαι).
γεν-	γέντο (γέλω, <i>hinhlian</i> , <i>kent</i>).
δεχ-	ἔδεξο, ἔδεκτο, ἀνεδέγμεθα, δέχεται, δέξο, δέχθαι, δέγμενος.
εὐχ-	εὐκτο.
ἱκ-	ἵκμενος.
κεν-	κέντο (κέλω).
λεγ-	ἐλέγμην, λέξο, λέκτο, ἔλεκτο, λέχθαι.
μιγ-	μίκτο, ἔμικτο.
ὀρ-	ὥρμην, ὠρτο, ὀρσο, ὀρθαι, ὀρμενος.
παλ-	πάλτο.
περθ-	πέρθαι.
πηγ-	κατέπηκτο.

To these may be added all the verbs which still retain the old system of person-endings.

CHAPTER V.

THE USE OF AUXILIARY VERBS IN GREEK.

WHEN a verb in some finite tense is prefixed to some other verb in the infinitive, so that the two taken together form one notion, and the combination is equivalent to a periphrasis of some tense, we say that the finite verb is used as an auxiliary. The verbs most frequently used in this manner are those expressive of the condition or power of the agent, of his freedom from external hinderances, whether moral or physical, of his thoughts, intentions, will, or desire. That the employment of auxiliaries originated in the substitution of syntactical contrivances for the etymological inflexions of the older language, after these last had fallen into disuse or had become less obvious and significant, has been already shown at some length. In most of the languages of modern Europe, the system of auxiliaries has superseded all inflexions of mood and tense, and, indeed, of voice too, in the common verbs. In our own language, some of the verbs employed for this purpose have lost their applicability as independent verbs: thus, we never say "to may," or "to can," or "to shall," or "to must," though "I may," "I can," "I shall," "I must," are in constant use, as auxiliaries, for the purpose of forming the potential mood, or the future tense, or an expression of obligation. In German, however, the verbs corresponding to these, namely, *mögen*, *können*, *sollen*, *müssen*, are capable of inflexion throughout all their moods and tenses with the exception of the participle present.

We have said that the verb, which the auxiliary modifies or which forms the pivot of the meaning, is in the infinitive mood. That the auxiliary could not be so used with the participle is obvious. The infinitive is, indeed, as we have shown in the preceding chapter, the same sort of word as the participle, but then it is a participle which has lost all power of change, being a form, sometimes mutilated, of the locative case, so that it expresses the locus of the action to which the possibility or will

denoted by the auxiliary has immediate reference. The participle, on the contrary, being capable of inflexion, expresses an hypothesis or some subordinate relation of the verb from which it is derived, the subject being the nominative case of the principal verb; in fact, participle and verb are equivalent to two verbs joined by a copulative conjunction, and there is no more reason why the verb should be considered as auxiliary to the participle, than the participle to the verb. There are, indeed, some cases where the Attic idiom employs the participle of the verb on which the whole force of the sentence depends, while the finite verb plays the part of a qualifying adverb; as in the following instances (given by Buttmann, *Griechische Grammatik*, § 144 *Anm.* 8, and § 150); τυγχάνω: ὥς δὲ ἦλθον, ἔτυχεν ἀπίων, “when I came, he went away *directly*” (schoolboys in this country would be told to translate this “he happened to go away”; but τυγχάνω implies hitting a mark, coincidence, especially in point of time, just as we say in lowland Scotch, “I happened upon him,” for “I fell in with him,” and the young student should be taught to translate it “directly,” “on the spot,” “at the moment,” or, in some cases, “precisely,” as in Isocrates *Areopagit.* p. 140 c. ἐγὼ δὲ δι’ αὐτὰ ταῦτα τυγχάνω δεδιώς, “it is precisely on account of these things,” or “on account of these very things, that I am afraid”),—λανθανω: ταῦτα ποιήσας, ἔλαθεν ὑπεκφυγών, “after he had done these things, he got off *unobserved*,”—φθάνω: ἔφθασα αὐτὸν παρελθών, “I came *earlier* than he did,” οὐκ ἔρθημεν ἐλθόντες, καὶ νόσοις ἐλήφθημεν, “we *no sooner* came than we were taken ill.”—διατελῶ: διατελεῖ παρών, “he is *always* there.”—χαίρειν: χαίρουσιν ἐπαινοῦντες “they praise *gladly*.” The last word may be used in a finite tense with the participle of the verb to which it refers. Thus we have not only οὐ χαίρων ἐπι ψόγοισι δεινάσεις ἐμέ (Soph. *Antig.* 758), “you shall not abuse me with impunity,” but also οὗτοι χαιρήσετον (Aristoph. *Equit.* 235), “you shall not escape unpunished.” It will easily be seen, that in all these cases the verb connected with the participle cannot be considered in any intelligible sense as an auxiliary. It might be supposed, however, that the use of ἔχω with a participle of the aorist, of which Valckenaer has given so many examples (*ad Phœniss.* 712, p. 310), is a periphrasis for the perfect; and indeed, it is used in connexion with the perfect in the line of Æschylus,

which he quotes: *πεποικίλωκε, κάποδηλώσας ἔχει*. We believe that it is not equivalent to the perfect, or, as Valckenaer suggests, to the aorist, but that it has a stronger sense than the perfect, expressing not only a state consequent upon an action, but also a *continuance* in that state; thus, *θαυμάσας ἔχω* means "I keep wondering," "I continue in a state of wonder." In this same sense ἔχω is used in the participle where we should employ an adverb: thus, *τί ληρεῖς ἔχων*; "why do you talk nonsense *continually*?" or "why do you keep talking nonsense?" The only case in which a periphrastic tense is really formed by means of the participle is, when the finite verb signifies "existence," that is, when it is a substantive verb; but in that case the difference is not one of tense, unless the participle be itself future, but of voice: compare *Ich werde gelobt*, "I am praised," with *Ich werde loben* "I shall praise." In French and Italian, the verbs *avoir*, *avere*, "to have" form a future tense with the infinitive and a perfect with the participle of the verb: compare *j'aimer-ai*, *io amer-ò* with *j'ai aimé*, *io ho amato*. But it must be recollected that these modern languages do not use the participle with such refinement of meaning as the ancient Greek, and in this particular case the passive participle is used as an adjective agreeing with the object of the verb. In French, the past participle and the object are in the same gender and number when the object precedes, though the participle is not declined when the object follows: thus, they say *j'ai reçu votre lettre* but *voici les lettres que j'ai reçues*. The principle has been fully explained by Du Marsais and other French grammarians. In old Italian, the past participle is frequently in concord with the object of the verb even when it follows: thus, Dante:

Ed un ch' avea perduti ambo gli orecchi,

and Boccacio: *Messer lo geloso s'avea messe alcune petruxze in bocca*. The future participle may often be translated by the infinitive, but this does not make the verb an auxiliary any more than *legatos misi qui peterent* is a periphrastic future. Even in phrases like *ὅπερ ἦα ἐρῶν* the use of ἐρῶν is distinct from that of the infinitive, though we should translate it in French or English, *ce que j'allois dire*, or "as I was going to say." The student who understands why *φαίνεται εἶναι* means

“it appears to be” (*videtur*), and φαίνεται ὄν, “it manifestly is,” i. e. “it appears so, and it is so” (*apparet*), need never feel any difficulty in discriminating between the syntactical uses of the participle and infinitive mood.

All verbs expressing power, will, &c., are, according to the idiom of the Greek language, immediately followed by an infinitive mood without any repetition of the subject of the primary verb when this is also the subject of the infinitive; τὸ γὰρ βούλομαι φιλολογεῖν, προαιρουμαι ἀναγιγνώσκειν οὐ δέεται τῆς προσδιαστελλούσης ἀντωνυμίας, ἐπεὶ δυνάμει ἐν αὐτοπαθείᾳ ἔχει τὰ τῆς συντάξεως, ἐπεὶ τοι πάλιν ἦν ὁ λόγος τοίουτος, βούλομαι ἐμαυτὸν πλουτεῖν, βούλομαι ἐμαυτὸν περιπατεῖν, τουτέστι διατίθεμαι εἰς τὸ περιπατεῖν, εἰς τὸ πλουτεῖν (Apollonius Dyscol. *de Syntax*. III. 32, p. 285 Bekker). It is not, however, to be concluded that every word so used is used as an auxiliary. The finite verb is to be considered as an auxiliary, and its combination with the infinitive as a periphrastic tense, only when the two together express some one notion which might be expressed by an inflexion of the latter verb, and when the former is in consequence used with a highly abstract meaning, much vaguer than the sense which it bears when uncompounded. Thus, to take the words expressing power or qualification, in such phrases as οἷός τε εἰμὶ ποιεῖν τοῦτο, ταῦτα πέφυκεν ἐπὶ τὴν ψυχὴν ἰέναι, πρέπων ἔφυς πρὸ τῶνδε φῶνειν, τλαίης κεν Μενελάῳ ἐπιπροέμεν ταχὺν ἰόν; the finite verb expresses only the abstract ideas, “I can,”—“these things are suited,”—“you are qualified,” “dare you,”—being quite subservient to and dependent upon the verb in the infinitive mood; so that these constructions are quite analogous to the Sanscrit periphrastic perfects, which, though formed of a finite verb and the infinitive mood of another verb, are equivalent to and are written as single words: thus, *içâm-babhûva* is written as a single word, though it is analogous in form as it is equivalent in signification to ἄρχειν πέφυκα. One of the Greek verbs expressing power or possibility is deserving of some particular notice, as well from its rareness as from its etymological connexion with a very interesting Sanscrit auxiliary. We refer to σωκέω “to be strong,” a derivative from σῶκος which appears in Homer, *Iliad* xx. 72, as an epithet of Hermes:

Λητοῖ δ' ἀντέστη σῶκος ἐριούνης Ἑρμῆς.

The verb occurs in two passages only; as an independent verb in Æschylus, *Eumenides*, 36: where, an old priestess in great trepidation, says

ἦ δεινὰ λέξαι, δεινὰ δ' ὀφθαλμοῖς ἰδεῖν,
 πάλιν μ' ἔπεμψεν ἐκ δόμων τῶν Λοξίου,
 ὥς μήτε σωκεῖν μήτε μ' ἀκταίνειν βάσιν,
 τρέχω δὲ χερσὶν, οὐ ποδωκία σκελῶν.
 δείσασα γὰρ γραῦς οὐδέν· ἀντιπαις μὲν οὖν.

That σωκῶ here is equivalent to ῥώννυμαι is clear from a passage of Homer, which Æschylus ὁ φιλόμηρος had in his head when he wrote these lines. In a case, precisely the converse of this, an old woman is thus described as running to tell good news (*Odyss.* xxiii. *init.*):

γρηῦς δ' εἰς ὑπερῷ' ἀνεβήσατο καγχαλώωσα,
 δεσποίνῃ ἐρέουσα φίλον πόσιν ἔνδον ἔοντα·
 γούνατα δ' ἐρρώσαντο, πόδες δ' ὑπερακταίνοντο.

(The editions read ὑπερικταίνοντο, an inexplicable word—the emendation we have introduced is supported by Hesychius, and the meaning of the passage; see Ruhnken *ad Timæum*, p. 20.) It must be clear to every one that the third line in the first of these passages, is the negation of the third line in the second. But σωκῶ occurs as a mere auxiliary in Sophocles, *Electra*, 120:

μόυνη γὰρ ἄγειν οὐκέτι σωκῶ
 λύπης ἀντίρροπον ἄχθος,

which Porson neatly translates, “for I am no longer able by myself to draw up the weight of grief which is in the opposite scale.” It is in this use that we are to compare σωκῶ with the Sanscrit root *çak-*, which is not only the most general word signifying ability or strength, but also an auxiliary possessing this peculiar power, that, when prefixed in the passive to an active infinitive (the Sanscrit language has no passive infinitive), it gives the verb with which it is joined a passive signification, as in the *Nalus*, XX. 5, *na âhartuṇ çak-ya-té*, which is as if you were to say in the Latin *afferre nequitur* for *afferri nequit*; compare the Latin infinitive future passive *amatum iri* (Bopp, *Glossar. Sanscrit*, p. 171).

The verbs ἐθέλω and μέλλω are used more distinctly as auxiliaries than any others in the Greek language. They properly express a will or intention, but are employed by the best authors to form periphrastic futures, in which they merely modify the time of the verb which accompanies them in the infinitive mood. Thus ἐθέλω is used in speaking of inanimate objects, as in Plato, *Respubl.* II. p. 370 B: οὐκ ἐθέλει τὸ πραττόμενον τὴν τοῦ πράττοντος σχολὴν περιμένειν, where the sense of will or intention is so entirely lost that the grammarians consider it as equivalent to δύναμαι (see Gregor. Corinth. *de Dialect. Attica*, § LXVII: Ἀττικὸν καὶ τὸ θέλει ἀντὶ τοῦ δύναται. ὡς Πλάτων. “τὰ χώρια οὐδέν μ’ ἐθέλει διδάσκειν” (*Phædrus*, p. 230 D), ἀντὶ τοῦ δύναται); and μέλλω is so constantly used in forming the future tenses of verbs, that ὁ μέλλον χρόνος is the regular name for future time, and τὰ μέλλοντα for future or expected events.

We purpose to devote the remainder of this chapter to an etymological investigation of the most important Greek words denoting will or desire. It is a matter of some interest to point out their primary meanings and their connexion with one another, and, as it would be difficult to do this in a satisfactory manner without the aid of the principles, which we have endeavoured to establish and explain in the preceding pages, a detailed examination of the question will not perhaps form an inappropriate conclusion to this work.

The words which we shall more particularly examine in this place are λάω, θέλω, βούλομαι, μάω, θυμός, and ὀργή, all expressive of will, desire, or intention. As the discussion will be long, and encumbered with references and remarks upon cognate words, it will be as well, for the sake of clearness, to state beforehand the general results to which the investigation will lead us.

It has been mentioned in a former chapter (above, p. 347), that there are two roots, *la-* and *ra-*, apparently identical, as well etymologically as in signification, which, though not connected with any pronominal roots, nevertheless perform all the functions of pronouns as organizing elements of language. The primary meaning of these elements, in their use as particles or terminations, is—motion towards an object (above, pp. 159, 213, 273, and elsewhere). From this meaning results the idea of taking or seizing an object, just as the preposition μετὰ

signifies both “following after” and “union with” (p. 237). The meanings “to look at” and “to desire” are also secondary ones, which association has attached to the root, but which it could not by itself express in any strong or decided manner. We have endeavoured to show, on a former occasion (above, p. 213), that, if the element *-ra* is subjoined to any pronominal stem, it denotes motion or continuation in a line of which the first point is indicated by the particular pronominal word. If, then, this element were appended to the first or second pronominal stems, *ma*, *Fa*, it would denote primarily a motion or emanation from the subject, or from that which is near to the subject. Of the former combination we have the following examples. The synonyms μέ-λος and μέ-ρος both express “division”, “separation of any object into its parts.” Now, if we resolve the sentiment or notion of division into its ultimate elements, we shall find that it is reducible to the idea of a line proceeding from the divider and cutting another line, the position of which is fixed. It is for this reason that the adjective signifying “middle” is formed by the adjunct *ya* from *mat*, the ablative of the first personal pronoun, which case of itself denotes emanation, or proceeding from (p. 323). This adjective is in Sanscrit *mad-hya*, in Latin *med-ius*. That the Greek μέσσος was originally μέσ-ιος for μέδ-ιος, we have shown above, from the analogy of ἰδ-ιος (p. 207); to which we may now add, that the form μέσιος at least is presumed in the derivative μεσίτης (see above, p. 335). The primary meaning of *med-ius*, &c., is “the quality of that which proceeds from the *me*.” Sometimes the preposition διά, which signifies penetration or division into two parts, is prefixed not only to the adjective μέσσος, *medius*, as in ἡμισυ, *dimidius* (above, p. 208), but also to the substantive μέρος, as in ἡμερος (above, p. 181), in order to express more strongly the ideas of “bipartition” or “a passage”. For further coincidences in meaning between these elements, we may compare μέλ-λειν, μελέ-τη, μέρι-μνα, μάρ-τυς, μερ-μήρ-ιζειν, *me-mor*, *mora*, &c., with *meditari*, *mederi*, *re-medium*, *modus*, *moderari*, &c., in which the idea of “thinking about, or providing for any thing” predominates. Nor ought the connexion of μέδι-μνα with μέρι-μνα to be overlooked. For the meaning of μάρ-τυς, *me-mor*, &c., we may compare the poetical ἐνδατεῖσθαι, which means

literally “to divide,” but is generally used in the signification “to commemorate” or “make mention of,” as in *Æschylus* (*apud Platon. in Republ. II. ad fin.*)—τὸν Ἀπόλλω ἐνδατεῖσθαι τὰς εἰς εὐπαιδίας. If we now turn to the second pronominal element we shall observe the following facts. This pronoun, in its oldest element, is **Fa**, or it consists of a guttural and labial, articulated, of course, by means of a short vowel. In combination with the element *-la* or *-ra*, it always bears a meaning derivable from one analogous to that of the similar formation with the first element: i. e., the primary meaning of **Fa-ra** is “motion from the *near*,” as *ma-ra* means “motion from the *here*.” It will be seen at once that these two meanings may present many points of contact. We have pointed out, in a former chapter, the many coincidences of the roots *χα-ρ-* Sanscrit *hrī*, and **Fa-ρ-** Sanscrit *vrī* (above, p. 365, and elsewhere). The investigation, on which we are about to enter, will render it probable that they are, after all, only by-forms of the same root **Fa**, the former representing the guttural, the latter the labial element of the initial digamma. We have already discussed so thoroughly the secondary meanings of these roots, that it will only be requisite in this place to collect the forms in which they occur. When we said that the primary meaning of *χα-* is “to lay open” (above, p. 361), we waived all reference to the pronominal origin of the root, which need not be taken into the account, except when we go back to the more remote origin, and consider the Indo-Germanic family of languages in all its comprehensiveness. We spoke then of the Greek language only. With meanings intimately connected the guttural element appears in *χείρ*, *χά-ρις*, *κάρ-πος*, *αἶρ-εῖν*, *έλ-εῖν*, *grei-fan*, *γέν-ειν*, *can-is*, *hin-than*, *hand*; the labial in **Fa-ρι-σπερός**, *vin-star*, *fan-gen*, *fin-ger*, *πέμ-πε*, *pan-chan*, *five*; and both elements in *cran*, *cpan*, *κύων*, *hun-d* (above, pp. 199—202). In the sense of seeing and taking, borne by *la* by itself, and occasionally with an additional **Fa** subjoined, we have *β-λέ-πω*, *β-λά-π-τω*, *γ-λαυ-κός*, *γ-λή-νη*, &c. In the sense of willing or wishing, also borne by *-la*, we have from the guttural element *θέ-λ-ειν* for *έλειν*, as *θάλασσα* from *σάλασσα* = *άλασσα*, &c. And here the compound of *-la*, *-ra*, with the second root, presents a most remarkable contact to the same combination with the first; for as we have *γέν-το*, *han-d*, &c., in connexion with *έλειν*, so we have *θέν-αρ*, “the

hollow of the hand," in connexion with θέλ-ω, and *manus*, "the hand," in connexion with μάρη = χεῖρ (*Schol. Venet. Iliad* xv. 37, whence εὐ-μαρής = εὐχερής); and the words θέρος, θερίζω, express the idea of "smoothness," "cutting down that which is sticking up" (namely, standing corn), just as these same ideas are conveyed by the more general words μαν-ρός, ἄ-μα-λός, and ἄ-μά-ω (above, p. 293). Finally, it will appear that as the root *la* or *ra* by itself, or with the suffix **Fa**, expresses motion in general, and particularly the emotion of desire, so the first and second elements under the forms *ma*, and *sa* or *tha*, with or without the suffix **Fa**, express the very same ideas—motion in general, and desire in particular; as will appear from an investigation of the verbs μάω and θύω; and thus it will be seen, that the ideas of will or desire, when expressed by verbs (with the exception of βούλομαι, which is a totally different case), are resolvable into pronominal elements or words significant of position, just as we have shown in the case of *vaças* and ἑκα. The contact and interpenetration, which we have remarked, in this case, between the first and second elements as used with the suffix *-la*, or *-ra*, will remove any difficulty occasioned by the similar interchange in the case of ἐ-γώ-ν, *a-ha-m*, and ἄ-γα-ν on the one hand, and ἐ-*kas*, *vaças*, and ἑ-*kas* on the other (above, p. 356).

The subjoined table will show the etymological connexion of the words of which we have been speaking. In the more detailed examination which follows, we have taken the words in the natural sequence of significations.

First and second pro-
nominal elements used
as verbal roots.

..... { $\mu\acute{\alpha}$ -ω,
 $\acute{\alpha}$ - $\mu\acute{\alpha}$ -ω,
 $\tau\acute{\iota}$ -θη-μι.

The same with the ele-
ment **Fa** subjoined. }

(1) *ma + va* { $\acute{\alpha}$ - $\mu\epsilon\acute{\upsilon}$ -ω (= $\acute{\alpha}\mu\epsilon\acute{\iota}\beta\omega$),
monéo.

(2) **Fa + va** { $\sigma\epsilon\acute{\upsilon}$ -ω,
 $\sigma\acute{\epsilon}\beta$ -ω,
 $\theta\epsilon\mathbf{F}\acute{o}\varsigma$,
 $\theta\acute{\upsilon}$ -ω,
 $\theta\upsilon$ - $\mu\acute{o}\varsigma$.

(1) *la + Fa*

{ $\lambda\acute{\alpha}\mathbf{F}$ -ω,
 $\lambda\alpha\beta$ -εῖν,
 $\acute{\alpha}\pi\omicron$ - $\lambda\alpha\acute{\upsilon}$ -ω,
 $\lambda\epsilon\upsilon$ - $\kappa\acute{o}\varsigma$,
lux,
 $\lambda\upsilon$ - $\kappa\acute{\alpha}$ - $\beta\alpha\varsigma$,
 $\lambda\acute{\upsilon}$ - $\kappa\omicron\varsigma$,
vrīkas,
lac-t,
 $\lambda\hat{\alpha}\mathbf{F}\alpha\varsigma$,
 $\lambda\epsilon\acute{\upsilon}\varsigma$,
lev-is,
lap-is,
 $\lambda\acute{\epsilon}\gamma\omega$,
 $\lambda\acute{\epsilon}\chi\omicron\varsigma$,
 $-\lambda\iota$ - $\kappa\acute{o}\varsigma$.

The element *la* or *ra* }
with **Fa** subjoined. }

(2) *ra + Fa*

{ $\rho\acute{\epsilon}\mathbf{F}\omega$,
 $\rho\acute{\epsilon}\pi$ -ω,
rap-idus,
 $\acute{o}$ - $\rho\acute{\epsilon}\gamma$ -ω,
 $\acute{o}$ - $\rho\gamma$ -ή,
reg-ere,
 $\rho\upsilon$ - $\mu\acute{o}\varsigma$,
 δ - ρ ($\acute{\iota}$) $\kappa\omega$,
d-rīcas,

The element *ma* and **Fa** }
with *la* or *laF*, or *ra* }
subjoined.

(1) *ma* + *la*,
or
ma + *ra*

{ μέλ-λω,
μολ-εῖν,
ἀ-μαλ-ός,
μέν-ω,
μαν-us,
μάρη,
μαυρός.

(2) **Fa** + *la-F*-
or
Fa + *ra*.

{ ἐλ-εῖν,
γέν-το,
θέλ-ω,
β-λά-π-τω,
γ-λαυ-κός,
ἐ-λ-κω,
θέ-λ-γ-ω,
γά-λα,
θέρος,
θέναρ.

We begin with *λάω*, which means not only “to wish”, but also “to take”, and “to see.” How *λάω* can signify both “to have”, and “to want”, has been already explained on general principles (p. 59), and the analogies of *capio* and *cupio*, *havere* and *habere*, *gestire* and *gerere*, are also so many illustrations of it in this particular case; it will be recollected too that *πλεονέκτης*, *πλεονεκτεῖν*, *πλεονεξία*, imply not only having more, but covetousness or desire to possess more (see Herodot. VII. 149, 158, VIII. 112). The two meanings, “take” and “see”, will cause no difficulty to any one who recollects that the German *tragen*, “to carry”, and *trachten*, “to look at”, are by-forms of the same root, and that *percipere*, “perceive”, is formed from *capio*, “take.” The connexion of “looking at”, and “longing for”, is obvious, and the German word *sehnsucht*, which expresses an earnest desire, is an instance of it. These meanings, “see”, “take”, and “wish”, run through a large class of words containing some modification of the root *λα-*, by a series of transitions perfectly similar to those we have remarked in the words belonging to the root *χα-ρ-*, and the transitions may be explained in precisely the same way by a reference to the principle of the association of ideas. This class is indeed a very

numerous and important one, for it contains all the old Greek words beginning with λα-, λε-, or λι-. In the verb λάω itself, the succession of meaning is, we conceive, first, simply to “see”, then “to take”, and thirdly, “to wish.” In Homer it is doubtful if it bears any meaning but the first. In the Hymn to Mercury (v. 360), where we have αἰετὸς ὁζὺν λάων, it evidently means “seeing”. The word occurs twice in the description of the cloak of Ulysses (*Odyss.* xix. 229), where it is rather uncertain whether it means “to hold”, or “to look at.” Either ^{of the} meanings would suit the context; Passow takes the latter; we incline to the former. The words are as follows:

ἐν προτέροισι πόδεσσι κύων ἔχε ποικιλον ἕλλον
ἀσπαίροντα λάων· τὸ δὲ θαυμάζεσκον ἅπαντες
ὥς οἱ χρύσειοι ὄντες, ὁ μὲν λάε νεβρὸν ἀπάγχων,
αὐτὰρ ὁ ἐκφυγέειν μεμαῶς ἥσπαιρε πόδεσσιν.

We think the last two words favor the former interpretation; ὁ κύων εἶχε τὸν νεβρὸν ἐν προτέροισι πόδεσσι, λάων αὐτὸν ἀσπαίροντα, ὁ δὲ νεβρὸς ἥσπαιρεν ἐν πόδεσσι τοῦ κυνός.

The words connected with λάω, in the sense of seeing, are β-λέπω, λεύσσω, γ-λήνη, γ-λαύσσω, λαμπρός, and λευκός. Hesychius quotes λεύσει (βλέψει, θεωρήσει) apparently as the future of λάω in this first sense; we might conclude that it is merely a mistake for λεύσσει, because in the next article he explains λεύσετε by ὁρᾶτε, βλέπετε; but it appears from the Scholiast on Homer, that Aristarchus considered it a future (see Alberti's note, 19). From the forms ἀπο-λαύ-ω = ἀπο-λα-μ-βάνω, β-λέπω, and λεύσσω, we are inclined to infer that the root was generally strengthened by the element Fa, that is to say, there is a secondary root λα-F- (formed of this root and the suffix Fa), which enters into the words in question: if so, λάFω bears the same relation to λεύσσω, that λαFας, another word of the same family, bears to λεύς, its synonym, and is related to β-λέπω just as λαFας is related to the Latin *lapis*. The same may be said of γ-λαύσσω, λαμπρός, and λευκός.

The suffix Fa also accounts for the labials which so often appear in words of this family bearing the second signification “to take.” Thus we have λα-μ-βάνω (where the μ is an euphonic insertion by way of *anusvāra*, as in λά-μ-πρός), λαπ-άζω, λαφ-ύσσω, λαύ-ρα, and ἀπολαύω. We regard λέγ-ω, “to pick

up", "select", "take one by one", "utter articulate and continuous words", and its derivative λέχος (properly, "a bed made up of gathered or picked leaves"), the by-form λέσχη, "a speaking place", for λέγ-σκη (above, p. 298), λάσκω, λάκω, "to speak", ἀδολέσχης, "a great speaker": also λα-γ-χ-άνω, "to receive by lot", and its substantive λάχος; and λάζομαι, "to take hold of", as containing all of them the same root. A word more nearly connected with λάβω, λα-μ-β-άνω, though we are not accustomed to view it in that light, on account of the β which is prefixed, is β-λάπτω, with its derivatives β-λάβη, &c., which are perfectly analogous to λαβή, &c. Another reason for our disregarding the connexion between β-λάπτειν, λάβω, and λαμβάνω, is, that we attend to only the derived sense of the former word, and disregard its proper and original meaning. The word β-λάπτω does unquestionably imply, in many cases, a certain degree of harm or mischief, but even where it bears this sense it is a sort of hindrance or accidental harm, some mere pain or loss, that is denoted, and never an injury of that kind which can cause resentment (see Butler's VIIIth *Sermon*). In fact, this distinction is frequently pointed out in the best Greek writers. In the following passage of Thucydides, for instance (I. 71), where the Corinthian ambassador says to the Spartans, οἶεσθε τὴν ἡσυχίαν οὐ τούτοις τῶν ἀνθρώπων ἐπὶ πλειστον ἀρκεῖν, οἱ ἂν τῇ μὲν παρασκευῇ δίκαια πράσσωσι, τῇ δὲ γνῶμῃ, ἣν ἀδικῶνται, δῆλοι ὥσι μὴ ἐπιτρέψοντες, ἀλλ' ἐπὶ τῷ μὴ λυπεῖν τε ἄλλους καὶ αὐτοὶ ἀμυνόμενοι μὴ βλάπτεσθαι τὸ ἴσον νέμετε—the distinction between ἀδικεῖσθαι and βλάπτεσθαι is clearly shown by the opposition of δίκαια πράσσειν to the one, and μὴ λυπεῖν to the other. This passage is considered a difficult one, and has been misinterpreted, we think, by all the commentators. The meaning is, "it is not your opinion that those persons enjoy peace the longest who, while they act justly, show that they have made up their minds not to submit to injury; but you lead a life of easy indifference, on the principle of not hurting others and of avoiding the inconveniences to which reprisals would subject you." The preposition ἐπὶ here implies a principle or condition of action—as in Demosthen. *Philipp.* II. p. 68, ἡγεῖτ' οὖν, εἰ μὲν ὑμᾶς ἔλοιτο φίλους, ἐπὶ τοῖς δίκαιοις αἰρεῖσθαι. The phrase τὸ ἴσον νέμετε, means "to act fairly or impartially to both of two parties." Thucyd. VI. 16, ὥσπερ δυστυχοῦντες

οὐ προσαγορευόμεθα, ἐν τῷ ὁμοίῳ τις ἀνεχέσθω καὶ ὑπὸ τῶν εὐπραγούντων ὑπερφρονούμενος, ἢ τὰ ἴσα νέμων τὰ ὁμοῖα ἀνταξιούτω—“if a man treats his inferiors as equals, he has a right to claim the same treatment from his superiors.” Herodot. VI. 11, and 109, θεῶν τὰ ἴσα νεμόντων, “if the gods remain neutral.” Aristotle (*Rhet.* I. 10, p. 1368, Bekker), by defining τὸ ἀδικεῖν as βλάπτειν, with the addition of purpose and illegality, implies that βλάπτειν was never considered to imply an injury or anything more than mere pain or loss occasioned unwittingly, or by an inanimate object. He says—ἔστω δὴ τὸ ἀδικεῖν τὸ βλάπτειν ἔκοντα παρὰ τὸν νόμον. It is well known that the original meaning of the word is “lay hold of”, “stop”, “retard”, “impede”; as appears from the following passages:

Homer, *Iliad* vi. 38:

ἵππῳ γάρ οἱ ἀτυζομένῳ πεδίῳ
ὅζῳ ἐνὶ βλαφθέντε μυρικίνῳ—, “caught in”;

Odys. i. 195:

ἀλλὰ νυ τόνγε θεοὶ βλάπτουσι κελεύθου—

“stop him from his journey.” On which Eustathius remarks: βλάπτειν, κυρίως τὸ ἐμποδίζειν τὸν τρέχοντα.

Æschyl. *Agamemnon*, 118:

βοσκόμενοι λαγίναν, ἐρικύμονα φέρματι, γένναν
βλαβέντα λαισθίων δρόμων,

“stopped from running any more races.”

Sophocles, *Electra*, 696:

ὅταν δέ τις θεῶν
βλάπτῃ, δυναιτ’ ἂν οὐδ’ ἂν ἰσχύων φυγεῖν.

“Whenever any god stops one’s flight, the best runner cannot get off.”

Ajax, 455:

εἰ δέ τις θεῶν
βλάπτοι, φύγοι γ’ ἂν χῶ κακὸς τὸν κρείσσονα.

“If any one of the gods were to stop the pursuer.”

We do not consider the word βράψαι, which is mentioned by Hesychius (βράψαι. συλλαβεῖν) as a synonym for βλάψαι, and which certainly is very like it in sound, to be connected with this root. Βράψαι, as Buttmann has remarked, is connected with μάρπτω, just as βλάξ is with μαλακός; μάρπτω is derived from μάρη = χεῖρ, and the same root is found in εὐμαρής, a synonym for εὐχερής. The word μαρήγει (= λαμβάνει Hesych.) is, perhaps, as Alberti supposes, a corruption for μάρπτω. We do not look upon β-ραβεὺς as connected with βράψαι: it is derived, as we have elsewhere surmised, from the ῥάβδος, which was the umpire's mark of distinction. In the word λεία, "a booty", "that which is taken", the connexion with λάω need hardly be pointed out: λισπὴ and λισσὴ are by-forms (see Hesychius). The common name for the lion, λέων, "the seizing animal", clearly belongs to this second class of the family of words into which the root λαF enters. The digamma in this name is preserved in the German *Löwe*, old German *Lev*. We have stated above (p. 364), that χάρων is another name for the lion, and that it means "the roaring beast". That the lion should have two names is not at all wonderful. "Of every thing in nature", says Bopp (*Annals of Oriental Literature*, p. 26), "of every animal, of every plant, speech can seize only one quality, in order to express the whole by it. The elephant is called in Sanscrit *dantin* (nominative *dantî*) from its teeth, or *dvirada* (endued with two teeth), or from his trunk serving him as a hand, he is called *hastin* or *karin* (nominative *hastî*, *karî*); from his habit of taking water in his trunk and then drinking when he pleases, he is called *dvipa* (twice drinking). Were the Sanscrit to express all these qualities of the elephant by one word, it would be obliged to join all those mentioned together, and to add a great number of others. The serpent is called from his motion *sarpa* or *pannaga*, going not with feet (from *pad* foot, *na* not, and *ga* going); or *uraga*, going upon the breast. Besides many other names, the serpent has also in Sanscrit that of *pavanâçana*, wind-eating." Besides this it may be mentioned that *cervus* is nothing but κέρεφος, "the horned animal", that *lobster*, *clubster*, or *clubstart* (= *clubtail*), is the English name, not merely for a thick-tailed shell-fish, but also for the stoat, an animal with a tuft on his tail (*Quarterly Rev.* Vol. LVII. p. 90), just as αἶλουρος

=αἰόλουρος and σκίουρος refer to the striped (αἰόλος δράκων conveys the same idea) or thick tails of the cat and squirrel, that ἀλωπήξ appears from the Sanscrit word *lōpāṣa* to signify "the carrion-eater" (the other Sanscrit name for the fox, *lōmaṣa*, means "hairy"), that the dog is called "the taker", *canis*, *hund*, &c., in all languages of the Indo-Germanic family (above p. 199), and so on. In λαῖσας, *lapis*, the idea of taking up is clearly implied, for the idea of "a stone" is that it is something detached and moveable, and, if we are right in supposing that λέγω also belongs to this root, it is an encouragement to the supposition that λαῖσας belongs to it also, when we find λέγω, λογάδην, &c. especially applied to the picking and placing of stones. The oldest walls in Greece, especially those which are called Cyclo-
+ Comp. H.
Sanskrit
ṣilā "a stone"
ṣila "to pick up"
pian, were formed of picked stones, which were adjusted together without cement as they happened to fit, the intervals between the larger blocks being filled up with smaller stones. Hence the idea of selection, of placing the small with the great, became identified with that of a stone, and it was customary to speak proverbially of such arrangements, without alluding to the word λίθος. Thus Sophocles says (*Ajax*, 158):

καί τοι μικροὶ μεγάλων χωρὶς
 σφαλερὸν πύργου ῥῦμα πέλονται·
 μετὰ γὰρ μεγάλων βαιὸς ἄριστ' ἀν
 καὶ μέγας ὀρθοῖθ' ὑπὸ μικροτέρων.
 ἀλλ' οὐ δυνατόν τοὺς ἀνοήτους
 τούτων γνώμας προδιδάσκειν.

The last line shows that the chorus is reciting a proverb, as we might say,

"Great without small
 Make a bad wall."

It is very strange that all the commentators have failed to perceive this obvious meaning of the passage, which is confirmed by a passage in Plato, *Legg.* p. 902 D: οὐ μὴν οὐδὲ κυβερνήταις οὐδὲ στρατηγοῖς οὐδ' οἰκονόμοις οὐδ' αὖ τισὶ πολιτικοῖς οὐδ' ἄλλω τῶν τοιούτων οὐδενὶ χωρὶς τῶν ὀλίγων καὶ μικρῶν πολλὰ ἢ μεγάλα· οὐδὲ γὰρ ἄνευ μικρῶν τοὺς μεγάλους φασὶν οἱ λιθολόγοι λίθους εἶ κείσθαι. Of the change of the vowel in λισπή, λισσή, and λίθος, we shall have further examples in the third set of words from this root.

Of *λάω*, in the sense of "to wish", we have the following forms, *λῶ*, *λῆς*, *λῆ*, *λῶντι*, and the optative *λέωμι* (Hesych.), also the reduplicated forms *λι-λαίεσθαι* (= *ἐπιθυμεῖν*, *ὀρέγεσθαι*, *σπεύδειν*. Hesych.) and *λι-λει* (= *φθονεῖ*, *ἐπιθυμεῖ*. Hesych.); *λίσσομαι* and *λίτομαι* likewise belong to this root; for their form compare the words *λίσση* and *λίθος*. Another form is *λιχάζει* (= *ἐπιθυμεῖ* Hesych.), with which may be compared *γ-λίχομαι*. To these we may add *λίπτω*, *λελιμμένος*, and *λίψ* (= *ἐπιθυμία* Hesych.), which appears to have the same origin with the Latin *libet* and *libido*. We do not consider the quantity of the first syllable as any objection to our classing *λιμός* and *λιπαρής* in this set of words. We have seen all through the words derived from *λαF* in all three significations an indiscriminate use of the vowels *α*, *ε*, *ι*. This has taken place on account of the connecting vowel being short, and the root being terminated by a digamma, which has been represented in the derived words by a great variety of substitutes. The lengthening of the syllables *λιπ-* and *λι-* may perhaps be indicative of a lost *guna* in the words *λιπαρής* and *λιμός*. At all events, this is a more satisfactory account of *λιπαρής* than the old explanation *ἀπὸ τοῦ λίαν παρεῖναι*, or than connecting it with *λιπαρός*, as Passow has done. It must be allowed, however, that Passow's explanation is defensible: the connexion, which he points out, between the meanings of *λιπαρός* and *λιπαρής* is sufficient to establish a relationship between the words, and *λιπαρός* (which is often applied to bright, shining substances) may very well be derived from *λάFω* in its first sense, just like *λευκός*. If this is the case, we must suppose the difference of quantity to have arisen from one of those accidents in language which cannot be properly accounted for by any causes known to us.

Before we proceed to consider *θέλω* and *βούλομαι*, it will be necessary to investigate the words *αἴγλη*, *ἀγλαός*, and *ἀγάλλω*, which Passow assigns to this root. A careful investigation will show us how far this is the case. The first of these words has excited some interest from an ingenious attempt which has been lately made to give a new meaning to it in the *Philoctetes* of Sophocles (v. 816). The passage runs as follows:

“Υπὺν ὀδύνας ἀδαής, “Υπνε δ’ ἀλγέων,
εὐαής ἡμῖν ἔλθοις

εὐαίων, εὐαίων ὦναξ.
 ὄμμασι δ' ἀντέχοις τάνδ' αἴγλαν
 ἃ τέταται τανῦν.

In the *Rheinisches Museum* (for 1828, p. 125, translated in the *Philological Museum*, I. p. 468), Welcker has endeavoured to prove from Bekker's *Anecdota* (p. 354), from Hesychius, and from Pollux, that, in the passage of Sophocles before us, αἴγλη signifies a band which Sleep was begged to continue holding before the eyes of the slumbering hero. In a subsequent paper (*Rheinisch. Mus.* for 1833, p. 454, note 3) he made some additional remarks on the same subject, of which it may be as well to give a translation. "It had been overlooked that in Epicharmus and in Sophocles himself αἴγλη signifies a glittering band to adorn the arm or leg; why then should it not signify an ornamental band in general, and, in poetic language, the band which sleep lays upon our eyes? As it is settled that αἴγλη signifies a band, we need no confirmations from works of art, and indeed there are none, to justify the simple, but beautiful and figurative use of the word by Sophocles; otherwise Göthe too has expressed himself obscurely and unpoetically when he says in his Faust:

Irrthum, las los der Augen Band,

'Error, release their bandaged eyes,'

and in the second part:

*Leise bist du nur umfassen,
 Schlaf ist Schale, wirf sie weg.*

'Lightsome bonds detain thee captive:

Sleep's a blindfold; cast it off!'

Even the expression λύνειν ὀφθαλμόν, βλέφαρα, leads us at once to this image. There is also a passage in Pindar which is restored for the first time to its proper beauty by the explanation of αἴγλη which I have pointed out. He expresses (*Pyth.* III. 73) his wish to land in Sicily, and bring Hiero, at the same time, health and the comus: ἀέθλων Πυθίων αἴγλαν στεφάνοις. In another passage he designates the song of victory itself as a wreath (*Pyth.* XII. 5); here, however, he mixes it up as a Tænia in the wreath obtained by Hiero (*Olymp.* III.

6, 12); not indeed *Λυδίαν μίτραν καναχηδὰ πεποικιλμέναν* (*Nem.* VIII. 14); but as a golden band, because the song is Doric. If we compare the remarkably various and pleasing images, which Pindar uses when speaking of his odes, we shall hardly give up the one mentioned above against the universal idea, especially since in other places he calls the song of victory a *Tænia* (*Olymp.* IX. 84), as one of many colours (*fr. inc.* 67). Nay, we must rather consider that in the very similar passage (*Olymp.* IX. 13) the same idea is conveyed by the word *κόσμος*. On the *Tæniæ*, see *Annali del Instit. Archeol.* Tom. iv. p. 381." It appears to us, that though Welcker's interpretation of the passage in Sophocles is characterized by his usual ingenuity, there are serious objections to it, and that he has proved nothing except that *αἴγλη* may signify a band, and that it probably does so in the passage which he has quoted from Pindar. One great objection to the application of this sense of *αἴγλη* to the line of the *Philoctetes* is, that in the other two passages in Sophocles where this word occurs it manifestly bears a different signification. In the *Æd. Tyr.* 207:

τάς τε πυρφόρους
Ἄρτέμιδος αἴγλας, ξὺν αἰῖ
Λύκι' ὄρεα διάσσει—

the word refers to the two torches with which Artemis is represented on ancient coins. In the *Antigona*, 610:

ἀγήρῳ δὲ χρόνῳ δυνάστας κατέχεις Ὀλύμπου
μαρμαρόεσσαν αἴγλαν,

the epithet shows clearly enough that *αἴγλη* implies nothing but the splendour and brightness of the abode of the gods. It might be thought that this last passage is a sort of confirmation of Welcker's opinion, and that *μαρμαρόεσσαν αἴγλην* refers to the band of snow with which Olympus is capped; but this cannot be: *μάρμαρος* was not used in Sophocles' time to signify a white stone more than any other bright, polished stone. The word *μορόεις*, which, as Döderlein justly remarks (*Lateinsche Synonym. und Etym.* II. p. 81 note), is connected with *μαρμαίρω*, is used as an epithet to ear-rings in *Iliad* xiv. 183. *Od.* xviii. 298, and it is certainly not hinted in either passage that the stones in the ear-rings were white. Besides, a poet, so full of taste and

art as Sophocles, would never have expressed such an allusion in so frigid a manner. Our chief objection to Welcker's supposition, is this, and we think it is decisive: you can gather from the context that Sophocles intended it in a different sense. The chorus says afterwards (847) in a parenthetical way—*ἀλεῆς ὕπνος ἐσθλός*, "sleep in the sunshine is good for our purpose," i. e. because it is very sound. If this was the opinion of the chorus, it was natural enough for them to pray that sleep would keep before the eyes of Philoctetes the light of the sun (*αἴγλη*) which was spread over them and prevented him from waking. That *αἴγλη* refers to the brilliant light of the sun in particular may be gathered from the hints of the lexicographers. *Anecd. Bekkeri*, p. 354. καὶ ἡ θυσία δὲ ἡ ὑπὲρ τοῦ κατακλυσμοῦ εἰς Δελφούς ἀπαγομένη αἴγλη ἐκαλεῖτο (it will be recollected that the Delphian god was also the god of the sun) ἀλλὰ καὶ ἡ σελήνη. Hesychius has the following articles: Αἴγλαήρ. ὁ Ἀσκληπίος (because he was the son of Apollo). Αἴγλης Χάριτες. πιθανῶς ἐγενεαλόγησαν τὰς Χάριτας, Αἴγλης καὶ Ἡλίου, ἐπεὶ τὰς Χάριτας λαμπρὰς εἶναι δεῖ, and Αἴγλητήν. ἐπίθετον Ἀπόλλωνος, where Toup quotes Apollon. Rhod. IV. 1716:

αἴγλητήν μὲν εὐσκοποῦ εἵνεκεν αἴγλης
Φοῖβον κεκλόμενοι.

Let us add a remark which we think is also of some importance. It cannot have escaped any one that all writers are apt to plagiarize from themselves. Now, although we are told that Sophocles published the *Philoctetes* 31 years after the *Antigona*, it cannot be believed that he never read the latter again: the beautiful chorus, from which we have just quoted (l. 583 foll.), must have been constantly in his mind, and we have no doubt was present to his memory when he wrote the lines in the *Philoctetes* which we have been discussing. A line or two before *μαρμαρόεσσαν αἴγλαν* the following passage occurs (600):

νῦν γὰρ ἐσχάτας ὑπὲρ
ρίζας ὃ τέτατο φάος ἐν Οἰδίπου δόμοις κ. τ. λ.

It will readily be understood what train of thought led him to substitute for ὃ τέτατο φάος in the one passage the perfectly synonymous αἴγλαν ἃ τέταται which we find in the other, and

how the αἴγλη which occurs so shortly after in the *Antigona*, became mixed up in the same sentence in the *Philoctetes*.

To return, however, from this digression, which has little to do with the etymology of αἴγλη (and that is the point we have now to discuss), we agree with Lobeck (*ad Soph. Aj.* v. 40. p. 97) in classing αἴγλη among the derivatives from ἄω, or as it should be written **Fα'Fω**. The labials may be recognized in *Favonius* and *vapor*, and perhaps also in φάος = φά'Fος = **FαFος**: compare the Sanscrit *bha-va-n-t* with φῶς, φωτός (above, p. 334). The *p* in *vap-or* as well as in the cases of a similar insertion which he mentions (note 14): δράω, δράπετης; θάω, θάπω; μέλος, μέλπω; κείρω, *carpo*, κάρπος; κοῖλος, κόλπος; λᾶς, *lapis*; χάω, *capio*; τρέω, *trepidus*; περόνη, πόρπη; *lupo lupercus*; are all, we think, to be explained in the same way. The other words connected like αἴγλη with ἄω are as follows—αὔω, αὐγή, αὔρα, ἀήρ, αἰθήρ, αἶθω, αἰθύσσω, *æstus*, αἶολος, *æstas*, αἶσσω, αἶξ (genitive αἶκος), αἷξ (genitive) αἶγος, and αἰγίς. In all of these we find the cognate ideas of blowing, flaming, shining, flickering, moving rapidly. That these ideas are related to one another and to those of “blowing,” or “the motion of the air,” and of “light” or “brightness,” is clear from a comparison of *flare* with *flagrare*; of φαῦλος with *felix*, *faustus* (above, p. 184); of λευ-κός with *lev-is*; from the various meanings of *micare* and “light;” and from the two uses of καταιθύσσω in Pindar (*Pyth.* IV. 83. V. 11). We have shown above that the stem λα- or λα-F-, which enters into words bearing all these meanings, primarily signifies only motion in general.

To this class of words then, we agree with Lobeck in referring the first syllable of αἴ-γ-λη, “the light of the sun;” and we entertain no doubt that ἀγάλλω and ἄγλαος are derived from it: that ἄγλαος, at least, is, appears from the fact that Ἀγλαΐη, one of the graces, was called by Hesiod by the same name as her mother Αἴγλη (*Senec. de Benefic.* L. III). We consider the ending to be a formation of the pronominal root **Fα**, under the form *ga*, with the element -*la*, which we have discussed above, and we proceed to show that whether it appears as γε-λάω, σέ-λας, ἔ-λη, or ἄ-γ-λα-ος, it conveys the same general notion of light or brightness. In Latin the ideas of “shining” and “laughter” are mixed up with one another: *renīdeo* “to throw back light,” a by-form of *nīteo*, is connected in meaning, perhaps in origin, with *rīdeo*,

as is proved by the following passages (quoted by Döderlein *Lat. Syn. and Etym.* II. p. 73). Catullus XXXIX. 15 :

*Renidere usquequaque te nollem
Nam risu inepto res ineptior nulla est.*

Tacitus *Annal.* IV. 60: *Tiberius torvus aut falsum renidens vultu*, and Acron *ad Hor. Carm.* II. 18, 2. *Nidor a nimio odore dictum, seu risu, unde et renideo*. That the much spoken of *ποντίων κυμάτων ἀνήριθμον γέλασμα* of Æschylus (*Prom.* 90) refers to the infinitude of glittering spangles which one may observe on the sea when a gentle breeze is passing over it in sunny weather, must, we think, have struck every reader of taste. It is well known too, that in modern French the epithet *riant* or “smiling” is constantly used in speaking of landscapes, &c., and the phrases “a cheerful prospect,” &c., are not uncommon among ourselves. The following glosses from Hesychius are conclusive in favour of the opinion that the ideas of merriment and brightness are included in the word *γέλαω*. *Γέλαν. αὐγὴν ἡλίου. Γελεῖν. λάμπειν, ἀνθεῖν*. There is no occasion to read here *Φέλαν*, as Toup proposes (*Vol.* III. p. 400, 473), any more than in *Βέλα. ἥλιος καὶ αὐγὴ ὑπὸ Λακόνων*, or in *Ἑλη. ἡλίου αὐλαία ἢ αὐγὴ* (Timæus); the γ, β, and aspirate in these words represent the digamma, as does also the σ in *σέλας, σελήνη*. In the word *γαλήνη* the leading idea is that of the sunshine or brightness which invariably accompanies fine weather in the East; the same idea of brightness accounts for the other meaning given to this word by Hesychius: *Γαλήνη. τὸ ἐπιπόλαζον ἐν τῇ μεταλλείᾳ τοῦ ἀργύρου χωνευομένου*. The idea of shining whiteness is conveyed also by the word *γάλα* “milk,” and in the Sicilian word *γέλα* (Lat. *gelus, gelu*) “frost,” which according to Lennep (*ad Phalarid. Ep.* 106. p. 308) is alluded to in the following gloss of Hesychius: *Κιέλλη. φέγγος, αὐγὴ, φῶς, πάχνη, ὁμίχλη*, where Ruhnken (*ad Tim.* p. 96) reads *βείλλη*. The Reviewer of Niebuhr’s *History of Rome* (quoted by Göller *de Situ et Origine Syracusarum*, p. 150) supposes that the Sicilian river Gela was so called from its coolness. We entertain a different opinion. When we remember that the city Gela was founded by the Rhodians (Thucyd. VI. 4), who were near enough to the Triopian promontory to have got some smack of the Triopian religion;

that the Triopian rites were at an early period introduced into that city (Herod. VII. 153); that one of the Triopian deities was Apollo (Herod. I. 144); that an ancestor of Gelon, one Telines of the island of Telos, was Hierophant of the Triopian rites (Herod. VIII. 153), and that this office remained in the family (Böckh *ad Schol. Pindar.* p. 314); finally, that the Athenian priest-tribe was called Γελεόντες¹ (Arnold's *Thucydides*, Vol. I. p. 659), and that the patron god of the old Athenians was Ἀπόλλων πατρῶος, considered as the sun-god (φασί τινες Ἀθηναίους αὐτόχθονας φῦναι καὶ τούτῳ γονέας ἔχειν Γῆν καὶ Ἥλιον, ὃς ὁ αὐτός ἐστιν Ἀπόλλωνι; *Schol. in Plat. Euthydem.* p. 369 Bekker); we cannot doubt that the city and river Gela, as well as the two kings Gelo and Hiero, owed their names to their connexion with the Triopian worship of the bright sun-god. On the whole, then, αἶ-γ-λη = Φά-γ-λη or φα-γέ-λη (for the change of place in the semivowel see above, p. 130 and elsewhere) is a word strongly expressive of bright, shining light, and is particularly employed to signify the sun. It is worthy of remark, that, as the latter of the two elements which go to make up αἶ-γ-λη, refers not only to "light", but also the sense of "seeing", as in λάω and β-λέπω; so the first part of the word expresses not only "light" or "brightness", but also "speaking" (ῆ-μι, αἶ-νω, see above p. 528), and by association "hearing" (αἶω; above p. 58). The connexion between "light" and the faculty of "seeing" is sufficiently obvious: without φῶς there could be no ὄψις (Plato *Respubl.* VI. p. 507 D). The ideas of "speaking" and "light" both belong to the more general one of manifestation. The etymological connexion of the words expressing them has been shown by A. W. Schlegel (in an article in the *Indische Bibliothek*, Vol. II. p. 284). Compare the Sanscrit root *bhâ* "to shine" with the Latin and Greek *fa-ri*, φη-μί "to say". The inflexions of the latter verb, in its Doric form, are perfectly identical with those of the Sanscrit *bhâ*: thus we have

bhâ-mi,
bhâ-si,
bhâ-ti,
bhâ-mas,

φα-μί,
 φα-σί,
 φα-τί,
 φα-μές,

1. Those who read Τελεόντες, must remember the gloss in Hesychius, Γέλα. τέλα.

*bhâ-tha,**φα-τέ,**bhâ-nti,**φα-ντί.*

The Greek *φαί-νω* “to shine” bears the same relation to *φά-μι*, that *αί-νω* does to the Latin *aio* or the Greek *ἤμι*. In the sense “light” we have the Sanscrit *bhâs* and the Greek *φάος*. Although the root *bhâ* itself never signifies “to speak”, we have with that signification the root *bhâsh*, which bears the same relation to it that *hrish* does to *hri* (above p. 369). Thus, we have *bhâshatê* = *loquitur*; *bhâsha* = *loquela, dialectus*; *bhâsh-itam* = *sermo*; *bhâshyam* = *commentarius*; *dvi-bhâshin* = *bilin-guis, interpres*; *abhi-bhâsha* = *allocutio*; *abhi-bhâshin* = *alloqui solitus*, &c.

In the dualism of the Greek mythology the Goddess of the Moon appears as the sister of Phœbus. Her name in connexion with this worship is *σε-λή-νη*, which is in fact only another form of *γ-λή-νη*. Compare *προυσελεῖν*, *προυγελεῖν*, and their probably original form *προσFελεῖν* (Buttmann, *Lexilogus* II. p. 159). In the Latin language we have the shorter form which contains only the element *λε-F-*: compare *Lû-na*, *lû-c-s*, with *σε-λήνη*, *λευ-κός*. We find a similar abbreviation in the Latin *lac-t-* “milk”, i. e. “white liquid”, compared with the Greek *γά-λα(-κ-τ)* (above p. 284). Whenever in cognate languages synonymous words exhibit the same root, sometimes with and sometimes without a prefix, we may generally conclude that the longer form is of later introduction, the additional syllable, which is generally of pronominal origin (p. 285), being prefixed for the sake of greater emphasis or distinctness. There can be no doubt, therefore, that the words *β-λέπ-ω*, *γ-λαυ-κός*, which exhibit the labial and guttural elements respectively of the pronominal prefix *Fa-*, are more recent than the simpler derivatives from the root *λε-* or *λεF-*. To return, then, to this shorter form, we have the three meanings “to see”, “to take”, and “to wish”, expressed by one word *λάFω*. At a subsequent period the root *Fa* was prefixed to that word, and different modifications of it were employed to express the same three different meanings. For the first sense “to see”, we have *β-λέπ-ω*, *γ-λαύ-σσω*, and for the cognate idea of light, we have *βέλα*, *γέλα*, *σέλας*, and *ἔλη*. For the second meaning “to take”, we have *β-λάπ-τω*, *γέν-το* (*Iliad* viii. 43, xiii. 241, xviii. 476), *έλεῖν*, and for the

cognate word "hand" we have *θέν-αρ* (for the *ν* compare Alcman's *κέν-το* for *κέλετο*: Eustath. p. 658, 29). And for the third meaning "to wish", we have the common word *θέλ-ω*, which, with the *θέν-αρ* just mentioned, bears the same relation to *σέ-λας*, *έ-λείν*, that the equally common *θάλασσα* does to the older form *σάλασσα* (Kön *ad Greg. Cor.* p. 300), and to *σάλος*, *σαλεύω*, *σαλάσσω*, *άλς*, &c., still used by the best writers. We think *Σαλαμίν*, as the name of an island, is also connected with *θαλάσσα*; so also *σαλασσομέδων* in Alcman's Ionics a minore:

'Ινὸν σαλασσομέδοισ', ἂν ἀπὸ μασθῶν
ρίπτειν φάτις γαλασηνὸν Μελικέρταν.

as emended by Porson (Gaisford's *Hephæstion*, p. 337). The labial element of the original digamma is still preserved in the Latin *volo*.

Before we proceed to investigate the origin of *βούλομαι*, it will be proper to inquire how far, in its actual use by the best writers, it agrees with or differs from *θέλω*, or rather *έ-θέλω*, as the word is written by the Epic poets, by Pindar, and, with the exception of phrases like *εἰ θέλεις*, by the prose writers in general.

Buttmann says (*Lexilog.* I. p. 26), "while *έθέλω*, which is beyond all comparison of more frequent occurrence, is the most general expression for *willing* (*Wollen*), but especially expresses that kind of willing in which a purpose (*Vorsatz*) is included, and therefore the willing which it is, or appears to be, in one's own power to execute; *βούλομαι*, on the other hand, is altogether limited to that kind of willing in which the wish and the disposition are either alone, or at least especially signified. Hence, it expresses the being ready and willing (*Bereitwilligkeit*) to do a thing which does not depend on oneself: for example, *Iliad* xxiv. 226:

εἰ δέ μοι αἶσα
τεθναμέναι παρὰ νηυσὶν Ἀχαιῶν χαλκοχιτώνων
βούλομαι:

Similarly it is used of a woman who can only act according to the will of others; *Od.* xv. 21: *Κείνου βούλεται οἶκον ὀφέλλειν ὅς κεν ὀπυίοι*, and of a mere wish, *Iliad* xv. 51: *καὶ εἰ μάλα βούλεται ἄλλη*. It is remarkable, therefore, that while the

active wish, which strives after its accomplishment as soon as possible, is in every other case expressed by ἐθέλειν (*Iliad* vii. 364: πάντ' ἐθέλω δομέναι. ix. 120: ἄψ' ἐθέλω ἀρέσαι, &c.); βούλομαι is used in this very sense of the gods only, for example, *Iliad* i. 67, Αἴ κέν πως—Βούλεται ἀντιάσας ἡμῖν ἀπολοιγὸν ἀμῦναι: and frequently thus, Ἑκτορι ἐβούλετο κῦδος ὀρέξαι, Τρώεσσι δὲ βούλετο νίκην, and so forth (*Il.* vii. 21, xii. 174, xxiv. 39. *Od.* iv. 275; see also *Iliad* xi. 319, where the older editions had ἐθέλει: see Heyne). There is obviously somewhat of respect implied in this expression, because in speaking of the higher powers in close connexion with the dead, we remark and mention the inclination, the condescension, the free-gift, which, with them, contains the completion in itself." He adds, that βούλομαι is used by Homer in the sense of "to prefer"; but never ἐθέλω. We have quoted this passage from Buttman on account both of his authority and of the general adoption of this opinion of his, though we are certain that his distinction will not hold any where but in Homer, and do not believe that it obtains even there. He is quite right in his general statement that ἐθέλειν means "to be willing", and βούλεσθαι "to wish"; that is the distinction which prevails throughout the Greek writers: in his application, however, he is not only wrong, but inconsistent. Let us turn to the first passage which he quotes from Homer; it is taken from Priam's answer to Hecuba, when she tries to dissuade him from going to ransom the dead body of Hector. At the very beginning of his speech (v. 217), he says μή μ' ἐθέλοντ' ἵεναι κατερύκανε, which means "do not detain me, for I *will* go," and in the passage quoted by Buttman, he says "if it be destined that I die by the ships of the Greeks, I am not merely willing, it is my wish ;

αὐτίκα γάρ με κατακτείνειεν Ἀχιλλεὺς
ἀγκὰς ἐλόντ' ἐμὸν υἱὸν, ἐπὴν γόου ἐξ ἔρον εἶην.

for I wish that Achilles would slay me, after I have taken my son in my arms and wept my full." In the passage from the *Odyssee* it is not true that βούλεται implies a mere acquiescence in the will of others: the wise goddess Athena tells Telemachus, that it is a peculiarity of a woman to feel a strong attachment to her husband, whoever he may be, and that it is her earnest

desire to further his interests as much as possible. Why the third passage was quoted we cannot see, for it so obviously means an active though fruitless desire, and has nothing to do with the *Bereitwilligkeit*—"the being ready and willing"—which he says is implied in βούλομαι. It certainly is somewhat remarkable that βούλομαι should be used by Homer in speaking of the gods, contrary to the sense of the word, and the use of all other writers. One would think that *will*, rather than *desire*, would naturally be attributed to a superior being. We must recollect, however, that Homer's gods were very second-rate personages, by no means equal to his heroes (Diomed chastises two of them in the same half-hour), so that we need not wonder if we find desire, and all other human feelings, attributed to them. In Demosthenes, ἂν θεὸς ἐθέλῃ, "if it be the will of God," is a common phrase (see for example, *Philipp.* I. 42, and *Herald. Animadv.* II. 5); and in *Olynth.* I. 23, he puts ἐθέλω, as applied to the gods, and βούλομαι, as applied to man, in direct opposition: δοκεῖ δ' ἔμοιγε, ὦ ἄνδρες Ἀθηναῖοι, δείξειν οὐκ εἰς μακράν, ἂν οἱ τε θεοὶ θέλωσι καὶ ὑμεῖς βούλησθε. And so we have in Plato, *Legg.* VII. p. 799 E, εἰ θεὸς ἐθέλοι; and in *Legg.* III. p. 688 E, εἰ θεὸς ἐθέλῃ. There are three passages, one in Euripides, and two in Plato, in which ἐθέλω and βούλομαι are so directly opposed, that we cannot mistake the distinction between them if we would. In the *Iphigenia in Aulide* (v. 336), Menelaus says to Agamemnon,

βούλομαι δέ σ' ἐξελέγξαι, καὶ σὺ μήτ' ὀργῆς ὑπο
ἀποτρέπον τάληθες, οὔτε κατατενῶ λίαν ἐγώ.
οἴσθ' ὅτ' ἐσπούδαζες ἄρχειν Δαναίδαις πρὸς Ἴλιον,
τῷ δοκεῖν μὲν οὐχὶ χρήζων, τῷ δὲ βούλεσθαι θέλων,

κ. τ. λ.

The two passages from Plato are as follows; *Legg.* IX. p. 863 B: ἡδονὴν...φαμέν...πράττειν ὃ τί περ ἂν αὐτῆς ἡ βούλησις ἐθελήσῃ. *Respublica* IV. p. 437 B: τί οὖν; ἦν δ' ἐγώ· διψῆν καὶ πεινῆν καὶ ὅλως τὰς ἐπιθυμίας, καὶ αὖ τὸ ἐθέλειν καὶ τὸ βούλεσθαι, οὐ πάντα ταῦτα εἰς ἐκείνῃ πῃ ἂν θείης τὰ εἶδη τὰ νῦν δὴ λεχθέντα; οἷον αἰετὴν τὴν τοῦ ἐπιθυμοῦντος ψυχὴν οὐχὶ ἥτοι ἐφίεσθαι φήσεις ἐκείνου οὐδ' ἂν ἐπιθυμῇ, ἢ προσάγεσθαι τοῦτο ὃ ἂν βούληταί οἱ γενέσθαι, ἢ αὖ, καθ' ὅσον ἐθέλει τί οἱ πορισθῆναι, ἐπινεύειν τοῦτο πρὸς αὐτήν, ὥσπερ

τινὸς ἐρωτῶντος, ἐπορευομένην αὐτοῦ τῆς γενέσεως; In all these three passages it is abundantly clear that βούλομαι and βούλησις refer to the desire or wishing for a thing, while ἐθέλω is restricted to the mere will or willingness. In regard to θέλων ἄρχειν in the passage from Euripides, it is evident from the perfectly similar sentence in Plato's *Politicus* (p. 299 B), that the mere willingness or acquiescence in the office is implied: "pretending to have no desire for the office, but in real wishes, in regard to his ambition, being perfectly willing to undertake it." The words of Plato are: οὐκοῦν ὁ γ' ἐθέλων καὶ ἐκὼν ἐν τοῖς τοιούτοις ἄρχειν δικαιοτάτ' ἂν ὅτιοῦν πάσχοι καὶ ἀποτίνοι; where the meaning is, "he who, willingly and of his own accord," &c., as in the *Protagoras* (p. 335 A): ὅτι οὐκ ἐθελήσοι ἐκὼν εἶναι ἀποκρινόμενος διαλέγεσθαι—"will not be willing as far as he is concerned." We do not recollect one instance in the good Greek writers in which βούλομαι and ἐθέλω are confused; they are as distinct in meaning and origin as the German correlatives *wünschen*, which answers to the former, and *wollen*, which translates the latter.

It is a common opinion (see Döderlein *Syn. und Etym.* V. 56, and Passow *s. v.* θέλω), that βούλομαι, the oldest form of which is βόλομαι, bears the same relation to θέλω, that *volo*, *volt*, *volebam*, *volent*, do to *velle*, *velim*, and *vis* for *velis*, and that the β and θ are interchanged like φ and θ in φῆρ and θήρ, and v and θ in *venari* and *θηρᾶν*; it is also suggested that the change from ε or ο to ου is explained by the transition from the Italian *volere* to the French *vouloir*. We hope it is unnecessary to mention here that this theory is based upon an error with regard to the regular vowel changes in the languages with which we are concerned (above, p. 300). On all sides, θέλω presents correspondences of signification to words containing the root **Feλ-**, with which, we have seen, it has an obvious etymological connexion; whereas βούλ-ομαι, with its two labials and heavier vowel ο, is no less distinct etymologically from the root **Feλ-**, than it is different in signification from the verb θέλω. And first, let us consider the lengthened form ἐθέλω. It is a well known fact, that, in the Greek language, the oldest verbs were very frequently reduplicated forms of those in common use. Now, it has been observed, that a number of verbs, which in the oldest state of the language were digammated, also in the old language

appear with an initial ϵ in the present tense (for example, $\epsilon\epsilon\lambda\delta\omicron\mu\alpha\iota$, $\epsilon\epsilon\lambda\pi\omicron\mu\alpha\iota$, $\epsilon\epsilon\rho\gamma\omega$, $\epsilon\epsilon\iota\delta\omicron\mu\epsilon\omicron\varsigma$, $\epsilon\iota\sigma\kappa\omega$; Buttman's *Ausführl. Sprl.* § 112, *Anm.* 23); which is merely a mutilated reduplication (Buttmann, § 82, 3 note). To this class we refer $\epsilon\theta\acute{\epsilon}\lambda\omega = \epsilon\mathbf{F}\acute{\epsilon}\lambda\omega$, and consider it, on the principle mentioned just before, as standing for the reduplicated form $\mathbf{F}\epsilon\mathbf{F}\epsilon\lambda\omega$. The only difference, in fact, between $\epsilon\theta\acute{\epsilon}\lambda\omega$ and $\epsilon\epsilon\lambda\delta\omicron\mu\alpha\iota$ is, that $\epsilon\theta\acute{\epsilon}\lambda\omega$ has only lost one digamma, and $\epsilon\epsilon\lambda\delta\omicron\mu\alpha\iota$ has lost both; the preservation of the one digamma in $\epsilon\theta\acute{\epsilon}\lambda\omega$ is due, we conceive, to the very common occurrence of the word from the earliest times.

In the second place, for the identity of $\theta\acute{\epsilon}\lambda\omega$ with $\gamma\epsilon\lambda\epsilon\iota\nu$, which Hesychius elsewhere explains by $\lambda\alpha\mu\pi\epsilon\iota\nu$. $\acute{\alpha}\nu\theta\epsilon\iota\nu$, we may take the following gloss of that lexicographer; $\theta\acute{\epsilon}\lambda\omega$. $\chi\rho\eta\acute{\zeta}\omega$, $\beta\omicron\upsilon\lambda\omicron\mu\alpha\iota$, $\epsilon\upsilon\delta\omicron\kappa\omega$.

Again, no one can doubt that $\epsilon\lambda\epsilon\iota\nu$ and $\epsilon\lambda\kappa\epsilon\iota\nu$ are connected. That such is the case is obvious from a comparison of the glosses $\Gamma\acute{\epsilon}\lambda\lambda\alpha\iota$, $\tau\acute{\iota}\lambda\alpha\iota$; $\epsilon\lambda\lambda\acute{\iota}\zeta\omega\nu$, $\tau\acute{\iota}\lambda\lambda\omega\nu$ (Hesychius); and the Latin *vello* (all which bear the sense of $\epsilon\lambda\kappa\epsilon\iota\nu$), with the common uses of $\epsilon\lambda\epsilon\iota\nu$. The connexion of $\epsilon\lambda\kappa\epsilon\iota\nu$ with $\eta\lambda\alpha\kappa\acute{\alpha}\tau\eta$ is acknowledged by every one who has read Buttman's paper on the $\eta\lambda\epsilon\kappa\tau\rho\nu$ (compare $\kappa\tau\acute{\epsilon}\nu\epsilon\varsigma$ $\epsilon\lambda\kappa\eta\tau\eta\eta\rho\epsilon\varsigma$, Phantias, *Ep.* 4, 5). Now Hesychius has the following glosses: $\Gamma\acute{\epsilon}\lambda\gamma\eta$ $\acute{o}$ $\rho\acute{\omega}\pi\omicron\varsigma$ $\kappa\alpha\iota$ $\beta\acute{\alpha}\mu\mu\alpha\tau\alpha$, $\acute{\alpha}\tau\rho\alpha\kappa\tau\omicron\iota$ $\kappa\alpha\iota$ $\kappa\tau\acute{\epsilon}\nu\epsilon\varsigma$ (on the first part see Toup, *Emendationes*, IV. p. 106); $\Gamma\acute{\epsilon}\lambda\gamma\iota\alpha$. $\pi\acute{\iota}\nu\eta$. $\sigma\pi\acute{\alpha}\theta\eta$. $\kappa\omicron\upsilon\rho\acute{\alpha}\lambda\iota\alpha$. From these we infer that there were other words connected with weaving and spinning also derived from $\epsilon\lambda\kappa\omega$: the change of the κ into γ is hardly worth noticing. Besides all this, we have the common word $\theta\acute{\epsilon}\lambda\gamma\omega$, the primary signification of which is "to enchant," "to act upon by charms." That in this sense it was nothing more than a synonym for $\epsilon\lambda\kappa\omega$ appears from the following considerations. The principal instrument in magic among the Greeks, especially for love-charms, was the wry-neck, $\acute{\iota}\nu\gamma\zeta$, a little bird which when fastened to a metal wheel and turned round like an $\acute{\alpha}\tau\rho\alpha\kappa\tau\omicron\varsigma$, was thought to have a $\delta\acute{\upsilon}\nu\alpha\mu\iota\varsigma$ $\epsilon\lambda\kappa\tau\iota\kappa\acute{\eta}$. Thus Pindar says (*Nem.* IV. 35): $\acute{\iota}\nu\gamma\gamma\iota$ δ' $\epsilon\lambda\kappa\omicron\mu\alpha\iota$ $\eta\tau\omicron\rho$ $\nu\omicron\upsilon\mu\eta\nu\acute{\iota}\alpha$ $\theta\iota\gamma\acute{\epsilon}\mu\epsilon\nu$, and Theocritus, II. 17: $\acute{\iota}\nu\gamma\zeta$, $\epsilon\lambda\kappa\epsilon$ $\tau\upsilon$ $\tau\eta\nu\omicron\nu$ $\epsilon\mu\acute{o}\nu$ $\pi\omicron\tau\acute{\iota}$ $\delta\acute{\omega}\mu\alpha$ $\tau\acute{o}\nu$ $\acute{\alpha}\nu\delta\rho\alpha$. Conversely, we find $\epsilon\lambda\kappa\epsilon\iota\nu$ $\acute{\iota}\nu\gamma\gamma\alpha$ $\epsilon\pi\acute{\iota}$ $\tau\iota\nu\iota$, and the word $\epsilon\lambda\kappa\epsilon\iota\nu$ is sometimes used absolutely for "to entice," just like $\theta\acute{\epsilon}\lambda\gamma\omega$. Thus we have in Lysias *De Eratosth. Cæde*, p. 191, Bekker: $\acute{\iota}\nu\alpha$ $\sigma\acute{\upsilon}$ $\gamma\epsilon$, $\epsilon\phi\eta$, $\pi\epsilon\iota\rho\acute{\alpha}\varsigma$ $\epsilon\upsilon\tau\alpha\upsilon\theta\alpha$ $\tau\eta\nu$ $\pi\alpha\iota\delta\acute{\iota}\sigma\kappa\eta\nu$ $\kappa\alpha\iota$ $\pi\rho\acute{o}\tau\epsilon\rho\omicron\nu$

δὲ μεθύων εἶλκες αὐτήν. Philostratus, *Imagg.* I. 4, p. 769, ἀσπάζεται τὸν θάνατον καλῶ καὶ ἡδεῖ τῷ ὄμματι καὶ οἶον ὕπνον ἔλκοντι. These two passages are quoted by Jacobs, *Anth. Pal.* III. p. 664, in a note on the words of Philippus :

ὥς ἐπιπερκάζεις μιὰ τριχί, νῦν φίλον ἔλκων,
τὴν καλάμην δωρῇ, δούς ἑτέροις τὸ θέρος.

That this primary notion of θέλγω and ἔλκω was connected with the idea of ἐλεῖν, λαβεῖν, is shown by the τῇ σῇ ληφθέντες ἴνγγι of Aristophanes (*Lysistr.* 1110), where Pindar would have written ἐλκόμενοι. The relation between θέλγειν and ἔλκειν is farther shown by a comparison of the forms θέλγητρον and ἔλκηθρον, θελκτικός and ἐλκτικός, θελκτῆρ and ἐλκητῆρ.

We must also say something of the adjective θέλεμος, which occurs only in the following passage of Æschylus (*Suppl.* 1006) :

ποταμούς δ', οἱ διὰ χώρας
θέλεμον πῶμα χέουσιν,
πολύτεκνοι, λιπαροῖς χεύ-
μασι γαίας
τόδε μιλίσσοντες οὔδας.

where the Chorus is not speaking of the Nile (as Passow supposes), but of the rivers of Argolis, in opposition to the rivers of Egypt. The glosses of Hesychius are (1) θέλεμον. οἰκτρόν. ἥσυχον. (2) θελέμῳ. ἡσύχῳ. οἰκτρώς. (3) θελερόν. θελεκτόν, καὶ τὸ θέλγον τὰ ὄμματα ἐπὶ κακώσει. The third gloss is corrupt : we must read, θέλκτρον, θελεκτόν, &c. With regard to the signification οἰκτρόν given to θέλεμον, we can only suppose some confusion about ἐλεῖν among the transcribers. The other meaning, ἥσυχον, is clearly that borne by θέλεμον in the passage of Æschylus ; this sense has been derived from θέλω in much the same way as that of ἔκηλος from ἐκών, which we pointed out before (above, p. 354) : the word can hardly be compared with γῇ ἐθέλουσα and *volentia rura*, quoted from Xenophon (*Æcon.* v. 12) and Virgil (*Georg.* II. 500) by Toup (*Emend. in Suid.* I. p. 285).

We believe, then, that βούλομαι has no etymological connexion with ἐθέλω. This at least we consider certain, whatever may be thought of the derivation we are about to propose for the former word. Most persons are aware that there are many words

in the Greek language which begin with the syllable βου-. In most of these words it is customary to explain this prefix from a gloss in Hesychius; Βοῦ. τὸ μέγα καὶ πολὺ δηλοῖ. Λάκωνες. Thus βουλιμία is translated "violent hunger", βούπαις, "a big boy." We remark, in the first place, that Hesychius assigns this prefix to the Laconians. We attribute no weight to the etymological guess work of Plutarch (*Sympos.* VI. 8): τὸ μὲν οὖν βούλιμον ἔδοκεῖ μέγαν ἢ δημόσιον ἀποσημαίνειν καὶ μάλιστα παρ' ἡμῖν τοῖς Αἰολεῦσι ἀντὶ τοῦ β τῷ π χρωμένοις οὐ γὰρ βούλιμον, ἀλλὰ πούλιμον οἶον πολύλιμον πάλαι ὀνομάζομεν. We believe that Hesychius had some good reason for attributing this prefix to the Laconians; what this reason was we will endeavour to show. The Spartan youth were divided into classes, which bore the same names as their flocks and herds, that is, were called after the first objects of classification in a primitive state. The larger divisions were termed ἀγέλαι, a word generally applied to herds of oxen; the smaller ἱλαι, a word in its ordinary acceptation denoting a troop of horse. There are two analogous adverbs corresponding to these two words, ἀγεληδὸν and ἱλαδον, both used by very old writers. Now it appears that in Sparta the ἀγέλη was called βούα (= ἀγέλη παίδων Hesych.); and its chief was termed βουάγορ (= ἀγελάρχης, ὁ τῆς ἀγέλης ἡρχων παῖς. Λακωνες. Hesych). From the form βαγός, which is found in Laconian inscriptions, Böckh is disposed to infer that the υ of βουάγορ, which is also written βοαγός, represents the initial digamma of the termination (*Corpus Inscript.* Vol. I. p. 612). We think it appears from the form βούα that the digamma belonged to the first part of the compound. There are two other words belonging immediately to this political division, Βουῶα. ἀγέλη—τετάχαθ' αἱ βουῶαι. ἀντὶ τοῦ βουσόαι κ. τ. λ. *Etym. Magn.* according to the admirable emendation of Hemsterhuis; and συμβουαδεῖ. ὑπερμαχεῖ. Λάκωνες (Hesychius). It will not be denied that the syllable βου- in these words is the element of βούς. If so, the name given in Sparta to a body of young men was literally the same as that borne by a herd of oxen. The connexion of βοῤῥη, "the war shout", with βούς or βοῤῥις has been mentioned above. We have here a transition from agricultural to political ideas, just as the step in that case was from agriculture to war. We have endeavoured to show on a former occasion that military arrangements were

the basis of all the organization of a Doric state, so that the transition is the same in both cases. It might be asked whether the word *συμβουαδεῖ* means "to shout together", from the one meaning, or "to herd together", from the other; from whichever of the two meanings it is derived, it is evidently a synonym for *βοηθεῖ*, and as such is a striking confirmation of the supposition, that the digamma appeared in *βοFη*. The same we consider to be the meaning of *βουγαῖος* = *βοFη* - *γαῖος* "delighting in battle". That the first syllable of *βούβρωστις* and *βούπρηστις* refers to cattle is generally acknowledged. A *βούπαις* was a boy of the *βούα*, or "of the herd". Now when we reflect that the Æolian form of *βούλη* was *βόλλη* (*τῆς βούλης ὑπὸ Αἰολέων βόλλας προσαγορευομένης*, Plutarch, *Quæst. Rom.* p. 288), when we call to mind that we have in old Latin both *boo* and *boro*, both *boarius* and *bovarius*, both *boatim* and *bovatim*, and that there were two old towns on the Appian way, i. e. in the midst of the old Pelasgian population of Italy, one called *Bōla*, the other *Bovillæ*, and that *bovile* is the old Latin for an ox-stall, we can hardly refuse to adopt an explanation of *βούλη*, which, while it accounts for *βόλομαι* as well as *βούλομαι*, is consistent and intelligible in every other respect. Only suppose that *βούλη* means an assembly, that it is another form of *βούα*, which we have seen applied to men, and we have every point about *βούλομαι* satisfactorily explained. It may be asked, how can a word which means an assembly come to signify "a desire of the mind"? We might just as well ask, why *ἀγών*, the primary meaning of which is a place of assembly (for example, *Iliad* vii. 298), afterwards came to signify not only the assembly itself, but the object of a particular kind of assembly (public games); also a fit and proper time for any thing (see Valckenaer *ad Phœniss.* 591); and, finally, the violent emotions of an agitated mind (Thucyd. VII. 71); or, to take a case exactly in point, it might as well be asked, why *consilium*, which originally meant nothing but a coming together, just as *exsilium* means a going out, should not merely signify an assembly of men who have come together to deliberate, but also bear every other sense of *βουλή*. This derivation explains a great many peculiarities about the word *βούλομαι*. In the first place, it shows us why it is a deponent verb, why it has no active form. We think it scarcely necessary

mention, that βούλη is antecedent, to the verb: βούλομαι, therefore, is properly "I am one of a βουλή", i. e. βουλεύω, save that βουλεύω always expresses a more decided, deliberate purpose than βούλομαι, which, in its original sense, perhaps bore the same relation to βουλεύω, that the deponent *consilior* does to the active *consulo*. From such a noun as βουλή one would expect to have a verb βουλάω, as from τιμή, τιμάω, and indeed, we find traces of such a verb in all the tenses but the present;—thus, we have βουλήσομαι, βεβούλημαι, ἡβουλήθην. The same sort of expectation is entertained and justified with regard to ἐθέλω, the oldest form of which (as we have rendered probable), is *Feλw*: for we have ἐθελήσω, ἡθέλησα. We believe the loss of the derivation syllable to have been occasioned by the very common use of the present tense of both verbs; it is this tense alone that is employed as a mere auxiliary.

With regard to the peculiarity in the augment of the aorist ἡβουλήθην, we think Buttmann's explanation is satisfactory. He observes (*ad Plat. Gorgiam ed. Heindorf*, p. 522), that, in verbs of cognate signification, we find analogous irregularities of form: thus, we have the curious futures ἔδομαι and πίομαι, the futures formed by the diphthong *ευ* from verbs in *εω*, as ῥεύσω, χεύσω, νεύσω, &c., and the anomalous infinitives κνῆσθαι, and ψῆν; thus also the verbs βούλομαι, δύναμαι, and μέλλω, which he remarks (*Ausführl. Sprl. § 83, Anm. 8, note*), have something analogous in their signification, make ἡβουλόμην, ἡβουλήθην, ἡδυνάμην, ἡδυνήθην, ἡμέλλον: and he conjectures that the augment may have been suggested by the sound of ἡθελον, which is also connected with them in meaning.

The use of βου-, as an intensive prefix, may be compared to that of ἱππο-, in ἱππόκρημνος, ἱππομάραθρον, ἱπποσέλινον, ἱπποτυφία, ἱππόπορνος. The same idea of weight or strength is conveyed by the word βούς in the proverb βούς ἐπὶ γλώσση, as indeed appears clearly from the words κρατερῶ ποδὶ in Theognis (815), and the epithet μέγας, which is joined to it in Æschylus (*Agamemnon* 36).

That the word βουνός was a strange and unusual one, appears from the explanation which Herodotus (IV. 199) thinks proper to give of it, and, indeed, from the express statement of Phrynichus (p. 355, Lobeck). Herodotus considers it a Cyrenæan word; τῶν ὑπερθαλασσιδίων χώρων τὰ μέσα, τὰ βου-

νοὺς καλέουσι. Valckenaer thinks (*ad Herod.* IV. 158), that it was taken by the Dorians to Sicily, and learned there by Æschylus, but from the manner in which it is introduced by this poet (*Supplices* 101) we have no doubt that he considered it an African word, and used it as such, because his chorus consisted of African damsels. The leader says:

ἰλεόμαι μὲν Ἀπίαν βούνιν,
καρβάνα δ' αὐδὰν εὐακοεῖς,

that is, "I salute the Apian βούνιν; you observe that I use the African word." We think, therefore, that the Cyrenæans must have been remarkable for their use of this word; whence they derived it, is another question. It was considered as a word of Greek origin by the grammarians. Thus, we find in the *Etymologicum Magnum*, Βούνις καὶ βουνίτις, ἡ γῆ. εἴρηται δὲ παρὰ τοὺς βουνούς· βουνοὶ δὲ εἰσιν οἱ ὑψηλοὶ καὶ ὀρώδεις καὶ γεώλοφοι τόποι. παρὰ τὸ βαίνειν ἄνω. Though we take the liberty of setting aside this etymology, we still think that the origin of this word is to be sought in the Greek language. If it means, as appears from all the grammarians, an elevation, it may be compared with the German *Bühne*. We are inclined to believe that we shall find its real origin best from a comparison of the following glosses in Hesychius; (1) Βουνίς. γῆ. Αἰσχύλος. (2) Βουνός. στιβάς. Κύπριοι. (3) Βουνοί. βωμοί. (4) Βούλακα. βόλου ὄνομα (read βώλου with Toup *Emendat.* VI. p. 30 and 274). (5) Βωμώ. οὕτως ἡ Μάκρις ὀνομάζετο. (6) Βωθεῖν, ὀμιλεῖν. βοηθεῖν. (7) Βώλαξ. βῶλος. γῆ. (8) Βωλόναί. οἱ μὲν κολώνας· οἱ δὲ, τὸ Κίλλαιον ἀκούουσι, διὰ τὸ ἀνακεχῶσθαι, παρὰ Σοφοκλεῖ. (9) Βῶλοι. γῆ. (10) Βωλώρυκα. τὴν σὺν. Λάκωνες. (11) Βώμενοι. οἱ περὶ τοὺς βωμούς, λόφους καλουμένους, κατοικοῦντες. (12) Βῶν. βούν. ὄπλον. (13) Βωνίτας. τοὺς ἐν ἀγρῷ, οἱ δὲ βουκόλους, ἢ ἀγροίκους. (14) Βώνημα. εἶρημα. Λάκωνες. (15) Βώσομαι. βοήσομαι. ἐπικαλέσομαι. (16) Βωστῆρες. νομεῖς. (17) Βωστρεῖν. βοᾶν. καλεῖν. ἐπικαλεῖσθαι. From (1) we learn that βουνίς means "the earth" in general; from (2) that βουνός means a heap of straw, for instance, litter for an ox; from (7), (9) and (10), that βῶλος is a synonym for βούνιν in the sense of γῆ, particularly among the *Lacœnians* (10); from a comparison of (1) with (13), and of (4)

with (7), we see that βουνὶς may be written βωνίς, and conversely βώλαξ may be written βούλαξ; from (3) we see that βωμός is a synonym for βουνός; from (8) and (11) we infer that βῶλος and βωμός may be translated, the one κολώνη, the other λόφος: now it so happens that both these words are used by Eustathius (*ad Iliad*, λ' p. 880) to explain βουνός; he says ἡ δὲ κολώνη καὶ λόφος ἂν λέγοιτο καὶ βουνός, ὅπερ Ἡρόδοτος μὲν Λιβύων λέξιν εἶναί φησιν, Αἴλιος δὲ Διονύσιος λέγει ὅτι Φιλήμων ἐπισκώπτει τὸ ὄνομα ὡς βάρβαρον, λόφον γὰρ καλοῦσι; from (5) it appears that the island of Eubœa, which is signified by ἡ Μάκρις (Strabo, p. 445), was called Βωμός: now we know that the name Εὐβοία was connected with βούς, either on account of its pastures or from the myth about Io: τάχα δ' ὥσπερ βοὸς αὐλὴ λέγεται τι ἄντρον ἐν τῇ πρὸς Αἰγαῖον τετραμμένη παραλία ὅπου τὴν Ἴω τεκεῖν φασιν Ἐπαφον, καὶ ἡ νῆσος ἀπὸ τῆς αὐτῆς αἰτίας ἔσχε τοῦτο τοῦνομα (Strabo, p. 445); from (12) (16) we observe that βῶς is a form of βούς; from (6) we see that βωθεῖν may stand as well for βουαδεῖν = ὀμιλεῖν as for βοηθεῖν; and from (14), (15) and (17), we discover that the Laconians could contract βοη- into βω-. We think that, after this comparison, no doubt ought to remain upon our minds as to the Greek origin of βουνός, as to its connexion with βούς, and as to its identity with βωμός and βώλαξ. We would, in addition, point out that the connexion between the land and the cattle, which are used for tilling it, is immediate. There is indeed reason to believe that in the oldest languages of the Indo-Germanic family, the names of the Cow and the Earth are commutable, the latter being derived from the former, which was the symbol of fruitfulness and agriculture. We may refer our readers to a good paper on this subject in the *Indische Bibliothek* (II. p. 288). The Sanscrit *gô*, nominative *gau-s* (masculine and feminine) signifies "a bull" or "a cow". In the feminine it also denotes "the earth". There is another Sanscrit word, *bhû-s*, which is confined to the latter meaning. Now it is singular, that while the Sanscrit *gô*, Persian *ku*, Frankish *chuo*, and Anglo-Saxon *cû*, all meaning "a cow", agree with one of the Sanscrit names for "the earth", the Greek βούς and the Latin *bôs*, perfectly coincide with the other. Thus, to take the cases which coincide in the three languages, we have

Nom.	<i>bhûs,</i>	<i>βοῦς,</i>	<i>bós,</i>
Gen.	<i>bhuvás,</i>	<i>βοῦός,</i>	<i>bovis,</i>
Dative and	<i>bhuvé,</i>	<i>βοῦί,</i>	<i>bovi,</i>
Locative,	<i>bhuví,</i>		abl. <i>bove,</i>
Accus.	<i>bhuvam,</i>	<i>βοῦν</i> (for <i>βοῦαν</i>),	<i>bovem.</i>

It is also remarkable that *γῆ*, Doric *γᾶ*, the common name for “the earth”, coincides with the other Sanscrit name for the earth, which also signifies “a cow”. As the nominative of the latter word is *gaus*, we should expect *gavam* in the accusative; whereas we have *gâm* or *gañ*, which is identical with the Doric accusative *γᾶν*. The Greek student will recollect that there is a longer as well as a shorter form of the Greek word for “the earth”, namely, *γαῖα* as well as *γῆ*. Lastly, it should also be mentioned, that the Germans have *Gau* “country” by the side of *Kuh* “cow”, and that our Saxon ancestors spoke of a “hide of land”.

The word *θυμός* is particularly interesting from its use in the Republic of Plato. It will be recollected that Plato, and Hooker, after him, consider the mind as performing the three distinct functions, reasoning, willing, and desiring; Plato divides the mind into three distinct faculties, by which these functions are performed, namely, *λόγος* or *λογισμός*, *θυμός*, and *ἐπιθυμία* (*Respubl.* IV. p. 439 D), the first belonging to the *τὸ λογιστικόν*, or rational part of the soul, the two last to the *τὸ ἄλογον*, or irrational part. The *θυμός* or *τὸ θυμοειδές*, however, is not identical with the *ἐπιθυμία*, though it is classed with it under the same general head, for it often contradicts it, and assists the reason in governing its unruly attempts to lead man into the wrong path: *οὐκοῦν καὶ ἄλλοθι, ἔφην, πολλαχοῦ αἰσθανόμεθα, ὅταν βιάζωνται τινα παρὰ τὸν λογισμὸν ἐπιθυμῖαι, λοιδοροῦντά τε αὐτὸν καὶ θυμούμενον τῷ βιαζομένῳ ἐν αὐτῷ, καὶ ὥσπερ δυοῖν στασιαζόντων ζύμμαχον τῷ λόγῳ γιγνόμενον τὸν θυμὸν τοῦ τοιούτου* (*Plat. u. s.* p. 440 A);—*τῷ θυμοειδεῖ προσήκει ὑπηκόῳ εἶναι καὶ ζυμμάχῳ τούτου (τοῦ λογιστικοῦ)* (*Ibid.* p. 441 E). We translate the word *θυμός* “the will,” because this term conveys to our minds the idea which, in this passage, Plato evidently attached to the word he made use of; Hooker, too, translates it “will,” and Hemsterhuis, the younger, *la velleité*. It seems, indeed,

that Plato thought he was using the word in a somewhat unusual signification; the first of the passages we have just quoted implies that, in his opinion, "anger" was the primary meaning of the word, as indeed is evident from his etymology in the *Cratylus* (p. 419 E): θυμὸς ἀπὸ τῆς θύσεως καὶ ζέσεως τῆς ψυχῆς ἔχει ἀν τοῦτο τὸ ὄνομα; and from the *Timæus* (p. 70 B): ὅτε ζέσειε τὸ τοῦ θυμοῦ μένος: he also uses the word to signify disposition in general, as appears from *Legg.* V. p. 731 B: τοῦτο ἄνευ θυμοῦ γενναίου ψυχὴ πᾶσα ἀδύνατος δρᾶν, and such is the usual and oldest meaning borne by θυμός. The meaning "anger", though certainly often conveyed by θυμὸς and always by θυμόω, appears to be quite a secondary one, and we can only explain Plato's addition of the participles λαιδοροῦντα and θυμούμενον, as an exegesis of θυμός, by supposing that, in his abstract way of considering verbs before substantives, he got into a habit of deceiving himself with the belief that the former necessarily preceded the latter, and that θυμὸς actually derived its primary meaning from θυμόω. This was far from being the case; indeed θυμὸς was a most proper word for his purpose, and, if it had been understood according to its old usage, he needed no addition to qualify it for the signification of "will," with which we find it used in the *Republic*. That this was its meaning in Homer, we see from the phrases, θυμὸς ἀνώγει, κελενεί, κέλεται με, ἤθελε or θυμῷ ἤθελε, like ἔετο θυμῷ (*Herod.* V. 59); and indeed this signification of θυμὸς is sufficiently clear from the word ἐπιθυμία, which Plato employs in opposition to it: ἐπιθυμία means "a setting one's mind upon a thing," "directing one's wishes to it," quite in accordance with the old sense of θυμός.

We may settle the etymology of this word without any difficulty: at the same time we will endeavour to decide some troublesome questions which have been started regarding certain words of the same family with θυμός. That the ideas of placing and being placed, of *setting* and *sitting*, *sidere* and *sedere*, are intimately connected, will, of course, be at once conceded: and we hope that those, who are inclined to adopt what has been said about the influence of suggestion by contrast on the formation of words, will be willing to allow that words significant of remaining and moving may have a common origin: if instances are required we may compare μένω, μνήμη, μένος, *mens*, *maneo*,

with μάω, μέμαα, μέμονα, αὐτόματος. The affinity of these forms is clear from ἐ-γεν-όμην, γέγαα, and γέγονα. The relation between μέν-ω and μέλ-λω (for μέλ-γω) is the same as that which subsists between κέν-το and κέλ-ετο, between γέν-το and ἔλ-ετο, &c. That μέν-ω agrees with μά-ω in expressing an expectation of, or a mental impulse towards, any object, as well as the meaning of fixity or continuance, which it generally bears, will appear from the following passages. Homer, *Iliad* xv. 599 :

τὸ γὰρ μένε μητιέτα Ζεὺς
νηὸς καιομένης σέλας ὀφθαλμοῖσι ἰδέσθαι.

Sophocles, *Philoct.* 511 :

ἐγὼ μὲν
ἐνθαπερ ἐπιμέμονεν
ἐπ' εὐστολου ταχείας νεὼς πορεύσαιμ' ἂν ἐς δόμους.

And the idea of remaining or abiding may be conveyed by the simple root μα-, without the suffix ν- : as in Æschylus, *Choëph.* 464 :

ἰὼ δυσκατάπαυστον ἄλγος
δώμασιν ἔμμοτον.

In the general sense of thinking or caring about any thing, μέν-ω, μέλ-λω, and the impersonal μέλει, may be compared with the Gothic *munan*, German *meinen*, old Nordish *man* (Grimm, I. p. 926). The same idea of thinking about a thing enters into the subjective negation μή (above, p. 255). All these words, as we have said more than once, are connected with the root of the first personal pronoun, and a feeling of subjectivity or self is at the bottom of them all. Compare the very similar form μόν-ος (above, p. 187). To return to the question before us: the root θε- means "to place" (τί-θη-μι); θα- or θο- means "to sit" (θα-άσσω, θῶ-κος), and θο- or θε- means "to run" (θό-ος, θέω), and these are ultimately identical. Modern scholars have not observed this fact, and have therefore got into great difficulties about some words of this class. The word which has caused them most doubt is θοάζω. That this word may signify "to move quickly," whether in a transitive or intransitive sense, appears from the following passages of Euripides :

(1) Transitively,

Bacchæ, 65. θαάζειν πόνον.

Iph. T. 1142. θαάζειν πτέρυγας.

Orest. 355. θαάζων σὲ τὸν μέλεον.

Her. F. 382. ἐθάάζον κάθαιμα σῖτα γέννυσι.

(2) Intransitively,

Bacch. 216.

κλύω—γυναικάς—ἐν δασκίοις
ὄρεσι θαάζειν τὸν νεωστὶ δαίμονα
Διόνυσον, ὅστις ἐστί, τιμώσας χοροῖς.

Troad. 349, 507.

μαινὰς θαάζουσα—θαάζει δεῦρο δρόμῳ.

Orest. 1542. θαάζων αἴθερος ἄνω καπνός.

Phœniss. 800. ἱππείαισι θαάζεις.

and its connexion with *thaos* is indisputable. At the same time it is equally clear that in *Æschylus*, *Suppl.* 610:

ὑπ' ἀρχὰς δ' οὔτινος θαάζων
τὸ μείον κρεισσόνων κρατύνει
οὔτινος ἄνωθεν ἡμέρον σέβει κάτω.

and in *Soph. Œd. Tyr.* 2:

τίνας ποθ' ἔδρας τάσδε μοι θαάζετε.

the meaning of the word is "sit": and, indeed, *Plutarch* (*de Audiendis Poetis*, p. 22 E) and the *Etymologicum Magnum* (v. *thaos*, p. 460, 10) acknowledge this meaning in *Sophocles*. But modern scholars, from not perceiving that the same root may convey contrasted ideas, have gone wrong about this word, for while *Buttmann*, on the one hand (in his *Lexilogus*, II. p. 105), thinks it necessary to suppose that *thaázō* "to move violently" is derived from *thaos*, and that *thaázō* "to sit" comes from *thaéō*, *τίθημι*; *Hermann*, on the contrary (*ad Sophoclis locum*), denies the existence of the latter signification, and twists the two passages of *Æschylus* and *Sophocles* to a very forced

and unnatural meaning. The gloss in Hesychius shows, not, as Hermann supposes, that he was puzzled by the word, but that it possessed a very extensive range of meanings: *θοάζει*, *τρέχει*, *μαίνεται*, *σκιρτᾷ*, *κτείνει* (read *ἐκτείνει*), *σπένδει*, *ταράττει*, *κάθεται*, *χορεύει*, *ἀνύει*, *ἡδεταί*, *τελεῖ*, *πλάττει*, *φοβεῖται*, *πλανᾷται*, *θεοφορεῖται*. That most of these meanings are directly, or by implication, conveyed by the word *θοάζω*, might easily be shown by a more minute examination of the whole family to which it is related.

The root *θα-*, *θε-*, or *θο-*, which we are now discussing, occurs in another, perhaps an older form, as *σα-*, *σε-*, or *σο-*. From many indications in the classes of words, into which one or other form of this root enters, it is probable that the syllable was generally closed by a *F*. We are disposed to believe that the ground-meaning of the root is "place" or "make," with which the second meaning, "be placed" or "seated," is most intimately connected. The most important word into which the root enters with this meaning is *θεός*, and its oldest form *σιός*, which was used by the Lacedemonians to the latest time, and to which *θεός*, as has been already remarked, bears the same relation that *θάλασσα* does to *σάλασσα*, and *θέλω* to *σέλας*. In compounds the Laconians pronounced it *ιός*. Thus Bacchus was called *εὔιος* for *εὔσιος*, just as they said *ποιῆαι* for *ποιῆσαι*, and *βουόα* for *βουσόα* (*Etymol. Magn.* p. 391). It may be interesting to know that there are in the Sanscrit language representatives both of *σιός* and *θεός*. To the latter the common word *déva* corresponds, to the former *çiva-s*, the name, indeed, of a particular god in the Hindu mythology, the god of fire (Bohlen *das alte Indien*, I. p. 206), but still only a general name for the Deity (Bohlen, I. pp. 148, 206), as appears from the neuter noun *çivam*, which means "happiness," "prosperity," the lot of the gods (*Arjuni Reditus*, V. 19), just like *εὐδαιμονία* in Greek. These two words and the Latin *divus*, if, as we have no doubt is the case, they are identical with the Greek *θεός*, *σιός*, would incline us to suppose that the digamma had slipped out in their Greek synonyms. In attempts to represent directly in Greek characters the Sanscrit and Persian names for the Divinity, this digamma sound is represented by the *υ*, or a lengthening of the root syllable. Thus Hesychius *Δεύας*. *τοὺς ἀκάκους θεούς*. *Μάγοι* (where Reland proposes to read *ἄνακας*

scil. τοὺς Διοσκούρους) Hesychius, and Athenæus, I. p. 27 D : ὅτι παρ' Ἰνδοῖς τιμᾶται δαίμων, ὥς φησι Χάρης ὁ Μυτιληναῖος, ὃς καλεῖται Σοροάδειος· ἐρμηνεύεται δὲ Ἑλλάδι φωνῇ οἶνοποιός, where he is evidently alluding to *Sûrya-dévas*, "the sun-god," who was, as we have elsewhere shown, the same as the god of wine. The Indians had, properly speaking, no wine-god (Schlegel's *Indische Bibliothek*, I. p. 250). If we may be allowed to hazard such a conjecture, the epithets in Æschylus *Persæ*, 86 : Σύριον ἄρμα διώκων, and in the oracle quoted by Herodotus, VII. 140 : Συριηγενὲς ἄρμα διώκων, where Xerxes, or the Persian war-god is spoken of, refer to the sacred chariot (τὸ ἄρμα τὸ ἱρόν, Herod. VII. 55), which always attended the Persian armies on their march, and which, though called the chariot of Jove by Herodotus (VII. 40), may have been identical with the chariot of the sun, Ἡλίου ἄρμα λευκόν, which Xenophon represents as following it (*Cyrop.* VIII. 3. § 12) ; for it was drawn by *white* horses, which were consecrated to the sun (Herod. I. 189. VII. 113), and a remarkably beautiful horse, sacred to that god, was led behind it (Q. Curtius, III. 3. § 13). The decision of Darius' claim to the throne by his horse's neighing at sun-rise (Herod. III. 84) seems to have reference to the same symbolical connexion of the horse with the sun. The epithet *συριηγενὲς* appears to be quite equivalent to the Sanscrit *sûrya-ja* or "sun-born." It is likely that the Greeks would have heard of the Persian name for this chariot, and that this name would be explicable from the Sanscrit is consistent with all that we know of the old language of the Persians. If this interpretation is not correct, we shall find it difficult to explain why the Syrian chariot should be so specially mentioned in connexion with the army of Xerxes. Still less shall we be able to explain the distich, quoted from a Spanish MS. by Blomfield on the passage of the *Persæ*, in which it is assigned to an Indian :

"Ἰνδος ὃδ' ἀνὴρ Τροίῃ Σύριον ἄρμα διώκων
Πουλυδάμας κείμει νεκρὸς ἐπὶ πατρίδι.

The supposition that the root we are discussing was $\theta\epsilon F$ is farther confirmed by the future $\theta\epsilon\upsilon\sigma\omicron\mu\alpha\iota = \theta\acute{\epsilon}F\sigma\omicron\mu\alpha\iota$, from $\theta\acute{\epsilon}\omega = \theta\acute{\epsilon}F\omega$, by the forms $\theta\alpha F\acute{\alpha}\sigma\sigma\omega$ (for in words of this kind we may presume that there was once a digamma), $\theta\alpha\beta\alpha\kappa\acute{\omicron}\nu (= \theta\alpha\bar{F}\alpha\kappa\acute{\omicron}\nu)$, which Gregor. Corinth. (p. 354) quotes as the

Doric form of θακόν, σέ-β-ω = σέFω = σεύω = σείω = σαι-νω, σοῦμαι = σοFομαι (which occurs in Apollonius Rhodius), σοβείν = σοFείν, and Ζεύς = δγεFs. Herodotus tells us (II. 52) that the name θεός was Pelasgian, and was derived from τί-θη-μι: ἔθνον δὲ πάντα πρότερον οἱ Πελασγοὶ θεοῖσι ἐπευχόμενοι, ὡς ἐγὼ ἐν Δωδώνῃ οἶδα ἀκούσας, ἐπωνυμίην δὲ οὐδ' οὔνομα ἐποιεῦντο οὐδενὶ αὐτῶν· οὐ γὰρ ἀκηκόεσάν κω. θεοὺς δὲ προσωνόμασάν σφεας ἀπὸ τοιούτου, ὅτι κόσμῳ θέντες τὰ πάντα πρήγματα καὶ πάσας νομὰς εἶχον. Plato derives the word from θέειν, from the apparent motion of the heavenly bodies which were the objects of worship in an elementary religion (*Cratylus*, p. 397 c. d). The *Etymologicum Magnum* (p. 445, 42) gives both etymologies. Clemens of Alexandria (*Strom.* I. *ad fin.*), like Herodotus, derives θεός παρὰ τὴν θέσιν καὶ τάξιν καὶ τὴν διακόσμησιν, and Eustathius too says (*ad Iliad.* p. 1148) that θεός is ὁ πάντα τιθεὶς καὶ ποιῶν. We agree with this etymology, as well from its obviousness, as because the analogy between Κάδμος, who was the god of the Pelasgians of Boeotia, and was identical with Κάδμιλος, one of the Cabiri (Müller's *Orchomenus*, p. 216), and κέκασμαι, κέκαδμαι, κέκαδον, κεκάδηκα (of which we consider the meaning to be the same as that of κοσμεῖν, even though there be no etymological connexion between them), would at once lead us to it. If this is the case, θεός means "the creator", in immediate connexion with which we have τίθημι, to "make" or "place", together with θύω, "sacrifice", and σέβω, "worship". The last word but one often expresses violent motion, but we do not think, with Passow, that this meaning is due to the notion of flaming, blazing, &c., derived from a sacrifice of burnt offerings. The meaning of motion became attached to words from this root according to the principle of suggestion from contrast, and there is no class of words in which the meanings are more mixed up together than in this. With regard to the form, θύω bears the same relation to θέFω, σέβω, &c., that βρύω and ἔμβρυον do to βρέφος. In the words θέω and θοός the most prominent meaning is that of motion. The latter is used in the sense of "terrible", "dreadful", when applied as an epithet to νύξ, but the idea of swiftness seems to be included in the word even in this application of it, for most persons, whose reason has not the full command over their other faculties, are accustomed to look upon

that which is sudden and startling as also alarming and terrible. Compare the use of *κατασπέρχω* (Thucyd. IV. 126), &c. Buttmann has clearly shown (*Lexilogus*, II. p. 60) that *θοός* has also the meaning "sharp", "pointed", as a synonym for *όξύς*: he appears, however, to be wrong in supposing that this was the primary signification, and that *θήγειν*, *θάσσον*, *ταχύς*, contain older forms and meanings of the word than *θέω*: a comparison of the terms "sharp" and "quick" in English, the use of the word "set", as applied to sharpening a knife, the resemblance of *ώκός* and *όξύς*, and the English word "fast", which means both "fixed" and "rapid", will show us that the ideas of fixedness, rapidity, and sharpness are frequently interchanged (see also above p. 293). There can be little doubt that, as Buttmann supposes, the *θητες* or lowest division of the subjects of Athens were so called from their being the oldest inhabitants, the *Sassen* or *Insassen* (inhabitants). The word *θοάζω* bears most of the significations of this root, as indeed we see from Hesychius, and the passages which we quoted before. The use of *ἐπιθοάζω* in Æschylus (*Choëph.* 853) and in Euripides (*Medea ad finem*) is to be explained from the meaning of "sitting as a suppliant", just as *προστρέπεσθαι*, "to turn oneself towards", and *προσικνεῖσθαι*, "to go to", came to signify absolutely "to supplicate", and especially a begging for purification on the part of a polluted person. The word *θυμός* conveys the idea of an eager motion towards any thing, an impulse, and in this sense it agrees pretty well with the second meaning of *θύω*, from which also the idea of anger may easily be derived: the idea of "motion towards" is implied in anger as well as in desire, and hence we have such phrases as *θυμοῦσθαι εἰς τι*, "to be angry with a thing", as in Herod. III. 52, *ἐς τοὺς τοκέας καὶ ἐς τοὺς κρέσσοντας τεθυμῶσθαι*. The phrase *ἐς κέρας θυμοῦσθαι* is of a different origin (above p. 217).

It has been mentioned above, that the initial syllable of a number of words, such as *θές-φατος*, *θές-κελος*, *θές-πισ*, &c., is merely a mutilation of *θεοῖς* (p. 390). This explanation is not applicable to *θεσ-μός*, which is a simple derivative from the root *θε-* now under discussion, the *σ-* being an euphonical insertion, as in *δεσ-μός*, from *δέω* (above p. 329). For *θεσμός* we have the by-form *τεθ-μός*; *θ* very often appears instead of *σ* before the termination *-μός*, and *vice versâ*;—thus we have not only

ῥυθ-μός, ῥυ-μός, but ῥυ-σ-μός was also used in the sense of σχῆμα by Democritus (Aristot. *Metaphys.* p. 1042, Bekker);—and τεθ-μός is written for θεθ-μός, just as we have ἐτέθην for ἐθέθην (above p. 467). A question may be raised, whether we should connect δεσ-πότης with δέω, like δέσ-μος, or with τίθημι. That the latter part of the word is connected with the Sanscrit *pat-is*, “a lord” or “husband”, Latin *pot-ens*, *pot-ior*, &c., is sufficiently obvious. For the feminine we have not only δέσ-ποινα (on this form see above p. 292), but also πότνια, corresponding to the Sanscrit *patnī*, and πότνα. We have πότνια with a genitive case, as an epithet, like the *Diva potens Cypri* of Horace: thus Homer, *Il.* xxi. 470: πότνια θηρῶν. Pind. *Pyth.* IV. 213=380: πότνια ὄξυτάτων βελῶν. Now the name for the master of a house in Latin is *hos-pes* (*hos-pit-s*), and it appears from a comparison of the Latin *hos-tis*, *hos-tia*, Gothic *Gasts*, Polish *Gospodar* or *Hos-podar*, New High German *ge-gessen*, and the Sanscrit root *ghas*, “to eat”, that *hos-pit-s* means “the master of the feast”. If, then, we remember how often τίθημι is used in speaking of a meal (comp. παρέθηκε τράπεζαν, &c.), and that the word θοί-νη, together with θῶσθαι and θώσασθαι, which are quoted from Æschylus as synonyms for εὐωχεῖσθαι, are manifestly connected with the root θε- (comp. θῶκος, &c.), we must conclude that δεσ-πότης is a synonym of the Latin *hos-pit-s*, and that the first syllable contains the root θε- by a change from θ to δ, like that which we have pointed out in the inflexions (p. 326) and terminations (p. 345) of the noun. Whether δοῦ-λος is connected with δέω, or bears the same relation to the Sanscrit *dāsa-s*, “a slave” (from the root *dās*, “to give”), that δαυλός does to δασύς (Pott, *Etymol. Forsch.* I. p. 190), we do not venture to decide. The common adjective from δεσπότης is δεσπόσυνος. We have, however, another form δεσπόσιος, in Æschylus, *Supplikes* 848: δεσποσίῳ ξὺν ὕβρει, where Turnebus reads θεσπεσίῳ, and Stephens δεσποσύνῳ. We think the word is genuine, and that it is confirmed by the name δεσποσιοναύτης, given by the Lacedæmonians to the Helots who were emancipated and sent on ship-board. Myron (*apud Athenæum*, p. 271 F) says: πολλάκις ἠλευθέρωσαν Λακεδαιμόνιοι δούλους, καὶ οὓς μὲν ἀφέτας ἐκάλεσαν, οὓς δὲ ἀδεσπότους, οὓς δὲ ἐρυκτῆρας, δεσποσιοναύτας δὲ ἄλλους, οὓς εἰς τοὺς στόλους κατέτασσον. It will be recollected, that in the passage under consideration, one

of the most corrupt in Æschylus, a Herald is endeavouring to force the Danaides to go on board a ship. It stands thus in the common editions:

σουσθε, σουσθ' ὀλόμεναι ὀλόμεν' ἐπ' ἀμίδα
εἶτ' ἀνὰ πολύρρυτον
ἀλμήεντα πόρον
δεσποσίῳ ξὺν ὕβρει
γομφοδέτῳ δὲ δορὶ δι' ὅλου
αἰμονέσως ἐπ' ἀμίδα
ἡσυνδουπια τ' ἅπιτα
κελεύω βία μεθέσθαι
ἵχαρ φρενιτάταν.

We would place a full stop after ὕβρει, and read the rest of the passage thus:

γομφοδέτῳ δὲ δόρει δι' ὅλου
αἶμον' ἔσω σ' ἐπ' ἀμίδα.
ἢ σὺ δουπεῖς, σ' ἀπύτα
κελεύω βία μεθέσθαι.
ἵκταρ φρενὸς ἄτα.

The metre is

- υ υ - υ υ - υ υ -	Dactylicum Hephthemimer.
- υ υ - υ - υ υ -	Choriamb. dim. acatalect.
- υ - υ - υ υ	Lecythius.
υ - - υ - υ - -	Dochmius cum Bacchio.
- - υ υ - -	Hipponact. Ion. maj. dim. brach.

On the form δόρει see Sophocl. *Æd. Col.* 626, and Hermann. The γομφόδετον δόρυ is the Herald's staff, which was, perhaps, χρυσείοις ἥλοισι πεπαρμένον like the wooden sceptre of Achilles (Homer *Iliad* i. 246), as the Scholiast explains it χρυσοῦς ἥλους ἔχον καὶ διαπεπερονημένων αὐτῶν ἡσφαλισμένον. We think the ἐπ' ἀμίδα in the next line shows that δόρυ cannot mean the ship as it must in l. 864, if the reading be correct. The future ἔσω does not occur, but we constantly find the aorist εἶσα in Homer; as in *Iliad* ix. 200: εἶσεν δ' ἐν κλισμοῖσι. xiii. 657: ἐς δίφρον ἀνέσαντες. *Odyss.* i. 361: ἐς ἀσάμινθον ἔσασα. For the

meaning of δουπεῖς here, see Euripides, *Alcestis* 103: οὐδὲ νολαία
 δουπεῖ χεῖρ γυναικῶν. We assume ἄπυτα as the Doric form
 of ἡπύτης, ἡπύτα, the Homeric epithet for a Herald. This
 epithet seems to have been in a manner appropriated to that
 office, so much so indeed, that it became a proper name. Thus
 Periphas, the Herald of Anchises, is called the son of Epytus:
 Homer, *Iliad* xvii. 325:

δέμας Περίφαντι εἰκὼς
 κήρυκ' Ἡπυτίδῃ.

and we know that these offices ran in families. In allusion to
 this Periphas, Virgil calls the tutor of Ascanius *Epytides*;
Aeneid. v. 547:

*Custodem ad sese comitemque impubis Iuli
 Epytiden vocat.*

Ovid, too, (*Fast.* IV. 44), speaks of *Epytus*, king of Alba:

Proximus est titulis Epytus, Alba, tuis.

Æschylus has borrowed the phrase βίᾳ μέθεσθαι from the Ho-
 meric τρις δὲ μέθηκε βίῃ (*Iliad* xxi. 177, *Odyss.* xxi. 125). The
 quasi-preposition ἵκταρ occurs in Æschylus *Agamemnon* 114:
 ἵκταρ μελάθρων; *Eumenides* 1000: ἵκταρ ἡμενοὶ Διός; and in
 Plato *Respubl.* IX. p. 575 c: οὐδ' ἵκταρ βάλλει. With this
 commentary, the meaning of the passage is sufficiently clear,
 and, though we do not advance these conjectures with any con-
 fidence, anything is better than the present state of the text;
in corpore vili etiam periclitandum erat, as the old physicians
 used to say.

With regard to θύμος and θυμέλη, the quantity of the
 first syllable is no reason against concluding that they are con-
 nected with θύω, as the similarity of meaning, especially of the
 latter word, would induce us to suppose. The quantity of the υ
 in words from this root is continually varying, why we know
 not, any more than we can explain why we should have both
 λιπαρῆς and λιπαρός. Why, for instance, should we have θύω,
 θύμα, θύλακος, and θούρος, but θυάω, θυσία, θύσανος, and
 θυήλη? The word θύμος seems to have derived its meaning from
 the use of thyme in fumigations, or because the brushwood of

the tree was employed for fuel in sacrifices: its resemblance to the Sanscrit *dhûma-s*, Latin *fumus*, is obvious, in spite of the difference of quantity; the word *thymus* was, of course, borrowed from the Greek.

The article of Hesychius on θυμός gives the following meanings, ψυχὴ ἢ προαίρεσις. ὀξύτης. πνεῦμα. ἐπιθυμία. ὀργή. λογισμός. Most of these we have already considered: that θυμός may signify πνεῦμα, a comparison of θέλλα forbids us to doubt. It is curious that Hesychius includes among the meanings the very two words which Plato opposes to it, ἐπιθυμία and λογισμός. The sense of anger is implied in ὀξύτης, not in ὀργή, which we must now examine. The word προαίρεσις, meaning a deliberate choice, is well known to the readers of Aristotle's Ethics.

That ὀ-ργή is immediately connected with ὀ-ρέγω appears from a comparison of ὀρόγυια (Pindar *Pyth.* IV. 406) with ὀργυία, of ἀλέγω with ἄλγος, &c. The word is made up of the elements *ra* + *Fa* with the vowel prefix *o*; compare *rego*, &c. (above p. 283). The same compound root appears in ῥέF-ω (fut. ῥεύ-σω), ῥεῦ-μα, ῥέπ-ω, ῥέ-μ-β-ω, ῥίπ-τω, ῥί-μ-φα, &c., in all of which the idea of accelerated velocity is conveyed, as also in the cognate Latin words *rap-io*, *rap-idus*, &c. We have it also in the word δέρκω, and in the Sanscrit termination *driças*, with the dental prefix (p. 284). These forms and the analogous compound -λι-κος, imply the sense of seeing. That this is only a secondary meaning is clear, the primary one being that of motion just mentioned. That this idea of motion, the common meaning of ῥέω, is implied in the Greek notions of seeing, light, &c., appears from such phrases as ἔστι χροά ἀπορροή σχημάτων (Plato *Men.* p. 76 D), and from the Greek conception of love as a kind of ophthalmia, caught by an efflux or emanation of particles from the eyes: thus Æschylus says, *Agamemnon* 414:

πόθω δ' ὑπερποντίας
φάσμα δόξει δόμων ἀνάσσειν.
εὐμόρφων δὲ κολοσσῶν
ἔχθεται χάρις ἀνδρί,
ὀμμάτων δ' ἐν ἀχηνίαις
ἔρρει πᾶς Ἀφροδίτη.

i. e. after the abduction of Helen, her image would seem to be mistress of the house: but Menelaus would take no pleasure in statues, however beautiful, and in the want of eyes (for the Greek statues had none, or rather they were cold and inefficacious) all love would vanish (see the imitation in Euripides *Alcestis* 348 foll.). Sophocl. *Antig.* 795:

νικᾷ δ' ἐναργῆς βλεφάρων ἱμερος εὐλέκτρον
νύμφας.

where the two genitives would be very awkward, unless βλεφάρων ἱμερος are to be taken together in close connexion (see Julius Pollux, II. § 63: λέγουντο δ' ἂν ὀφθαλμοὶ λάμποντες, κ. τ. λ., καὶ τὸ ἀπ' αὐτῶν ἀπορρέον, ἱμερος). Euripides *Hippolytus* 525:

ἔρως, ἔρως, ὅς κατ' ὀμμάτων
στάζεις πόθον, εἰσάγων γλυκεῖαν
ψυχᾷ χάριν.

Plato *Phædrus* p. 251 B: δεξάμενος τοῦ κάλλους τὴν ἀπορροήν διὰ τῶν ὀμμάτων. It is possible that the sense of hearing conveyed by the cognate words κ-λύ-ω, λύ-ρα, Sanscrit *ṣ-ru-*, &c., may have a similar origin. There is also some trace of an implication of the sense of seeing in the root *θαF-*, the primary meaning of which is motion or impulse. Thus, the words expressing astonishment, *θαῦμα*, *τέ-θηπ-α-*, *θά-μ-βος*, &c., are clearly connected with *θάω*, *θαύω*, and *θεάω* "to gaze at."

Hesychius gives ὀργή the three following significations: *τρόπος*. *μανία*. *θυμός*. the order of which should, however, be reversed, for *θυμός* is the word which contains the primitive meaning of ὀργή. The ground-idea in both is the same, "an impulse," or "moving in any direction." The analogy between *θυμός* and ὀργή is farther observable in the application of the roots of both to the designation of sacred rites: that *θύω* and its derivatives are so applied, we have already seen, and the same may be said of ὀργια, ὀργεών, ὀργιάζω. This meaning appears to be derived from the custom of holding out the hands or parts of the offerings to heaven, (comp. *duplices tendens ad sidera palmas*, and *porrigit exta bovis*), just as *adoro* derives its meaning from the custom of turning the face to the sky. When ὀργάω is applied to vegetable productions, it refers to their

“sprouting,” “rising above ground,” “moving upwards,” hence, is deduced the sense of “ripe,” “soft,” which is found in ὀργάζω, (compare the passages in Ruhnken’s *Timæus* under the words μετρίως ὀργασμένος and ὀργᾶ). That this was the transition appears from the conjunction of πεπαίνεται with ὀργᾶ in Herodotus, (IV. 199): ὁ ἐν τῇ κατυπερτάτῃ τῆς γῆς πεπαίνεται τε καὶ ὀργᾶ. We do not agree with Passow in supposing that σφριγᾶω, and σπαργᾶω, which are used as synonyms for ὀργᾶω, are etymologically connected with this word, but would rather connect them with σφαραγέω, ἀσπάραγος, (Attice ἀσφάραγος), and the German *Spargel*, *Sprosse*, and *spriessen*.

The sense of “anger,” which Hesychius assigns to ὀργῇ when he renders it μανία, is quite a secondary one; the transition is the same as in θυμός. The third meaning, τρόπος, is a very old one of this word (Hesiod. *Op.* 306). Whether it is derived from the connexion of will and character, which we have before pointed out, or by some transition to the meaning of ὀργάζω, similar to that which produced the words “humour” and “temperament,” we cannot pretend to say. There is a singular passage of Thucydides (VIII. 83) in which the word occurs in the plural number: πάντων τε Ἀστύοχον εἶναι αἴτιον, ἐπιφέροντα ὀργὰς Τισσαφέρνει διὰ ἴδια κέρδη. Dr Arnold’s translation of this phrase (“humouring,” “supplying or ministering tempers such as a man likes,”) seems to show that he approves of the interpretation of the Scholiast, who says τὸ ἐπιφέρειν ὀργὴν ἐπὶ τῷ χαρίζεσθαι καὶ συγχωρεῖν ἕταπτον οἱ ἀρχαῖοι. μάρτυς Κρατῖνος ἐν Χείρωνι λέγων τὴν μουσικὴν ἀκορέστους ἐπιφέρειν ὀργὰς βροτοῖς σῶφροσι. This passage of Cratinus, compared with the words of Thucydides, assures us that the interpretation of the Scholiast is incorrect. The phrase ἐπιφέρειν ὀργὰς could not signify to bring one’s own disposition to suit that of another. It must mean, rather, to suggest some humours, dispositions or habits of mind to another, like ἐπιφέρειν δόξας (Plato *Respublica* X. p. 612 B), &c. Cratinus says, that music puts restless whims into the heads of sober-minded people: and Thucydides, that Astyochus was charged with suggesting caprices, or putting crotchets into the head of Tissaphernes: that he induced those whims which prevented the Satrap from dis-

charging his duty to the confederacy. That ὀργαὶ may be used in the plural after such a verb as ἐπιφέρειν appears from Lysias (*de cæde Eratosth.* p. 94): ὀργὰς τοῖς ἀκούουσι παρασκευάζουσι: and that it implies, when thus used, "habits of thought," or, "a turn of mind," may be seen from Soph. *Antig.* 354. ἀστυνόμους ὀργάς, and from Thucyd. III. 82: ὁ πόλεμος πρὸς τὰ παρόντα τὰς ὀργὰς τῶν πολλῶν ὁμοιοῖ. In the same way, θυμοὶ is used in the plural when the temper of one man only is spoken of; Sophocl. *Aj.* 716:

εὐτέ γ' ἐξ ἀέλπτων
Αἴας μετανεγνώσθη
θυμῶν Ἀτρεΐδαις μεγάλων τε νεικέων.

Heracleides, *Allegor. Homer* 19: ἐπισκοτούμενου τοῦ κατὰ τὴν κεφαλὴν λογισμοῦ τοῖς περὶ τὰ στέρνα θυμοῖς. *Id.* 59: αἱ πρῶται τῆς ἱκεσίας φωναὶ τοὺς ἄρσενας αὐτοῦ θυμοὺς ἐξεθήλυναν. These two passages^{are} quoted by Lobeck (p. 488).

THE END.

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ADDITIONS AND CORRECTIONS.

Page 62, line 20, *for* surmounted *read* overcome.

p. 69, l. 1, *for* ζυνιέναι, *read* ξυνιέναι.

..... l. 23, *for* ιδεά *read* ιδέα.

p. 70, l. 2 from bottom: *for* in it *read* in the Platonic dialogue.

p. 88, l. 14, *for* decided opinion *read* decision.

p. 119, l. 2 from bottom, *for* quilk *read* quhay.

p. 179, add at the end of l. 17, "except so far as the guttural element is represented by the vowel ι (see above, p. 119, below, p. 346)."

p. 181, l. 21, add: "compare Pindar, *Isthm.* III. 75 (iv. 97):

*καὶ βαθυκρήμνου πολιᾶς ἀλὸς ἐξενρῶν θέναρ,
ναυτιλίαςί τε πορθμὸν ἀμερώσατο.*

which refers to the passage of Hercules through the straits; and for the etymology compare Ἡπειρος with its epithet διαπρύσιος (Pindar *Nem.* IV. 51), on the principle pointed out by Lobeck (*ad Soph. Aj.* 254, p. 193)."

p. 187. l. 6 from bottom, add: "The ἱα mentioned above is obviously connected with the second pronominal element: compare ἱ, *hi-c*, &c.: on the various coincidences in meaning between the first and second elements see above, p. 180, and below, pp. 356, 544."

p. 196, l. 6 from bottom: *for* Rosen *read* by Rosen.

p. 209, l. 8, *for* τρῖτος *read* τρίτος.

p. 222, l. 9, *for* ἐπαλλάπειν *read* ἐπαλλάττειν.

p. 226, l. 15, *for* ἴσω *read* ἔσω.

p. 236, l. 10 from bottom: *for* ᾶ-δελφος, σά-δελφός *read* ἄ-δελφός, σα-δελφύς.

p. 237, l. 3 from bottom: *for* with κατὰ *read* to κατὰ.

p. 249, l. 1, *for* μεν *read* μεν.

p. 289, l. 9, *for* java *read* yava.

p. 372, l. 5 from bottom: *for* πρεῖς *read* τρεῖς.

p. 406, l. 4 from bottom: *for* 441 *read* 44.

p. 422, l. 7, *for* all those *read* all those things.



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